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Bryn Mawr
College Calendar

The Graduate School
of Arts & Sciences

1980-81



**Bryn Mawr College Calendar
The Graduate School
of Arts and Sciences**

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Graduate Work at Bryn Mawr

Graduate students at Bryn Mawr are members of a small scholarly community in which they work as apprentices and junior scholars in close cooperation with faculty. In most departments, programs are designed for each graduate student according to individual preparation and experience. The work is organized in the form of seminars, graduate courses, and individual supervised study.

Founded in 1885, the Bryn Mawr Graduate School was the first graduate school for women in the United States. Since 1931 both men and women have been admitted, but only after 1965 were adequate funds obtained to offer support for men comparable to that offered to women. Always small in relation to other graduate schools, Bryn Mawr has expanded gradually in response to the need for men and women well prepared for teaching and research. In 1970 the Graduate School of Arts and Sciences and the Graduate School of Social Work and Social Research were organized as two distinct schools. Today, the student enrollment in the Graduate School of Arts and Sciences is about four hundred.

Graduate work leading to the degrees of Master of Arts and Doctor of Philosophy is available in:

Anthropology

Biochemistry

Biology

Chemistry

Classical and Near

Eastern Archaeology

Economics

Education and

Child Development

English

French

Geology

German

Greek

History

History of Art

Latin

Mathematics

Philosophy

Physics

Political Science

Psychology

Russian

Sociology

Spanish

Work leading to the degrees of Master of Social Service and Doctor of Philosophy is available in the Graduate School of Social Work and Social Research.

College Calendar 1980-81

The Graduate School of Arts and Sciences

First Semester—1980

- July 1 *Applications for loans due*
- Aug. 20 *Final date for filing completed applications for admission for 1980-81*
- Aug. 28, 29, Sept. 2, 3, 4, 5, 8, 9 *Registration period for semester I*
- Sept. 2 *Graduate residence opens*
- Sept. 4 *Convocation*
Work of the 96th academic year begins at 9 A.M.
- Oct. 4 *Spanish, Italian, Russian, Latin, Statistics examinations for M.A. and Ph.D. candidates*
- Oct. 17 *Fall vacation begins after last seminar*
- Oct. 22 *Fall vacation ends at 9 A.M.*
- Oct. 25 *German examinations for M.A. and Ph.D. candidates*
- Nov. 1 *French examinations for M.A. and Ph.D. candidates*
- Nov. 26 *Thanksgiving holiday begins after last seminar*
- Dec. 1 *Thanksgiving holiday ends at 9 A.M.*
- Dec. 1 *Final date for filing completed applications for admission for semester II*
- Dec. 8-16 *Registration period for semester II*
- Dec. 24 *Winter vacation begins*

Second Semester—1981

- Jan. 19 *Convocation*
 Work of semester II begins at 9 A.M.
- Jan. 21 *Applications for M.A. candidacy due in the Office of*
 the Graduate School of Arts and Sciences
- Jan. 25 *Final date for filing completed applications for scholar-*
 ships (foreign students) for 1981-82
- Feb. 1 *Final date for filing completed applications for fellow-*
 ships, scholarships, and grants (citizens of the United
 States and Canada) for 1981-82
- Feb. 21 *French examinations for M.A. and Ph.D. candidates*
- Feb. 28 *Spanish, Italian, Russian, Latin, Statistics examinations*
 for M.A. and Ph.D. candidates
- Mar. 7 *German examinations for M.A. and Ph.D. candidates*
- Mar. 13 *Spring vacation begins after last seminar*
- Mar. 23 *Spring vacation ends at 9 A.M.*
- Apr. 1 *Ph.D. dissertations in all fields except natural sciences*
 and Mathematics must be submitted to the Office of the
 Graduate School of Arts and Sciences for May 1981
 degree
- Apr. 7 *Spring Registration*
- Apr. 16 *M.A. papers due for candidates away from Bryn Mawr*
- Apr. 21 *Ph.D. dissertations in the natural sciences and Mathe-*
 matics must be submitted to the Office of the Graduate
 School of Arts and Sciences for May 1981 degree
- May 1 *Last day of seminars*
- May 17 *Conferring of degrees and close of 96th academic year*
 Graduate residence closes

Admission to the Graduate School of Arts and Sciences

Requirements

Students must be graduates of colleges or universities of acknowledged standing. For special requirements set by individual departments, see the departmental listings beginning on page 17.

Procedure

The applicant should write to the Dean of the Graduate School of Arts and Sciences, Bryn Mawr College, Bryn Mawr, Pennsylvania 19010, for application forms, indicating the field of special interest. The application must be supported by official transcripts of the student's complete academic record and by letters from the dean and two or more professors with whom he has done his major work. Although an interview is not required, candidates who wish to come in person to discuss their plans or the Bryn Mawr program are welcome. The applicant should write directly to the chairman of the department to arrange a meeting. No application will be considered until all the necessary documents have been received. Students are accepted for either full-time or part-time work. For citizens of the United States and Canada and for foreign students presently in the United States, there is an application fee of \$25.00 which is not refundable.

Graduate Record Examinations

Applicants are advised to take the Graduate Record Examination Aptitude Test as well as the Advanced Tests in their fields of special interest. In certain departments these examinations are required, as indicated in the departmental listings. Inquiries concerning the Graduate Record Examinations should be addressed to Graduate Record Examination, Educational Testing Service, Box 955, Princeton, New Jersey 08540 or to Graduate Record Examination, Educational Testing Service, 1947 Center Street, Berkeley, California 94704.

Dates

1. *Citizens of the United States and Canada:*

Applications for admission in all departments must be complete by August 20. Graduate Record Examinations: October 18,

1980; December 13, 1980; February 7, 1981; April 25, 1981; June 13, 1981 (aptitude only). New York State students should contact ETS concerning GRE dates.

2. *Foreign applicants:*

The closing date for admission is August 20. Applications must include the scores of the Test of English as a Foreign Language (TOEFL), the Examination of the English Language Institute of the University of Michigan, or another approved language test. Since applications from students who desire financial aid must be completed by January 25, applicants must arrange to take language tests well before that date.

For information concerning the TOEFL write to: TOEFL, Educational Testing Service, Princeton, New Jersey 08540. Tests are given on August 9, 1980; October 4, 1980; November 22, 1980; January 17, 1981; March 14, 1981; May 16, 1981. Students in departments requiring the Graduate Examination should also arrange to take these tests not later than October.

3. *Applicants for financial aid:*

Students wishing to apply for fellowships, scholarships, assistantships, tuition grants, or other forms of financial aid must present complete applications by the following dates:

For United States and Canadian citizens:

Applicants for fellowships, scholarships, assistantships,
full-time and part-time tuition grants February 1

Applicants for loans August 1

For foreign citizens:

Applicants for scholarships January 25

GAPSFAS forms must be submitted to the Educational Testing Service, Princeton, New Jersey 08540 by January 9 (see page 86)

Admission to Graduate Seminars and Courses

Admission to graduate seminars and courses is under the jurisdiction of the various departments. Students whose preparation is inadequate may be required to enroll as special students to take appropriate undergraduate courses (for which no graduate credit is given). At the end of one or two semesters the department reviews the work of the special student and makes a recommendation to the Dean concerning the student's admission to the regular graduate program.

Registration

All graduate students, after consultation with the chairmen of their departments, must register at the Office of the Graduate School of Arts and Sciences in the M. Carey Thomas Library each semester during the registration period listed in the College Calendar. Changes in registration require the approval of the department chairman and the Dean.

Personal registration is an important obligation of the graduate student. Those who fail to register in the stated period will be charged a late registration fee.

Students wishing certification to outside agencies must complete a form to be signed also by the department chairman and deposited in the Office of the Graduate School of Arts and Sciences.

Continuing Enrollment, Leaves of Absence

Students who have completed the required academic units for the Ph.D. degree and are continuing work on their dissertations must retain their enrollment and degree candidacy by registering for one or more units each semester, or by paying the continuing enrollment fee.

Graduate students who are candidates for the Ph.D. degree may, with the approval of their departments, apply to the Dean of the Graduate School of Arts and Sciences for a leave of absence for one semester or one academic year. The Dean may grant such leaves for a total period not exceeding two years. Leaves of absence exceeding the two-year period can be granted only with the approval of the department, the Dean of the Graduate School of Arts and Sciences, and the Council of the Graduate School of Arts and Sciences. No fee is required of students granted leaves of absence.

Students who are planning 1) to present themselves for College examinations, 2) to use the College libraries or laboratories or 3) to consult members of the faculty must register under the continuing enrollment plan. Such enrollment does not carry academic credit.

Degree Candidacy

Students become candidates for advanced degrees only after they have met departmental requirements and made formal application which has been approved by the Council of the Graduate School of Arts and Sciences.

Resources for Graduate Work at Bryn Mawr

The Mariam Coffin Canaday Library and the eight auxiliary libraries of Bryn Mawr College, including the Art and Archaeology Library in the M. Carey Thomas Library, contain over 550,000 books and regularly receive more than 2000 periodicals as well as many scholarly series. The Library is open throughout the year with a liberal schedule of hours. Books are readily accessible on open stacks and in study rooms; individual carrels are available for advanced students.

The John D. Gordan Reference Center provides a focus for reference books and services in the Library. In its card catalog, the main entry cards of the Haverford College Library join those of the Bryn Mawr Library, thus bringing more than 960,000 entries into one file. The Library is a member of the Pennsylvania Area Library Network/Union Library Catalogue of Pennsylvania (PALINET/ULC), which locates approximately 7,200,000 volumes in the Philadelphia area and throughout the state, including the libraries of the American Philosophical Society, the Library Company of Philadelphia, the Historical Society of Pennsylvania, the Academy of Natural Sciences, the Free Library of Philadelphia, the Franklin Institute, the College of Physicians, the Rosenbach Foundation, the University of Pennsylvania, and Temple University. In addition, through the PALINET component of the PALINET/ULC, the Library has access to the OCLC data bank of over 6,500,000 titles cataloged for academic and other libraries throughout the United States. The Library also began dial-access bibliographic research services in 1979.

The Rare Book Room houses the Marjorie Walter Goodhart Medieval Library of incunabula and medieval manuscripts. Important and extensive collections of early material on Latin America, Africa, and Asia are to be found in the Dillingham, McBride, and Plass collections. The Castle and Adelman collections expand the opportunities for the study of the graphic book-arts. The Adelman Collection also substantially increases the Library's holdings of literary and related manuscripts. In addition to these special collections are numerous other rare books and manuscripts.

Bryn Mawr has a study collection of archaeological and ethnological materials which is used for research by graduate and undergraduate students. The Ella Riegel Museum of Classical

Archaeology contains examples of the Greek and Roman arts, especially vases, and a small group of pre-classical antiquities. It includes the classical Greek coins assembled by Elisabeth Washburn King and the Aline Abaecherli Boyce Collection of Roman Republican silver coins, as well as the Densmore Curtis Collection presented by Clarissa Dryden. Professor Hetty Goldman donated an extensive series of pottery samples from the excavations at Tarsus in Cilicia. Old World Paleolithic, Neolithic, Paleo-Indian, Eastern Woodland, Southwestern, Middle Mississippian, and Mexican antiquities are also represented at Bryn Mawr in addition to the Ward Canaday Collection of outstanding examples of most of the known ceramic and textile traditions of Peru.

The Geology Department has valuable materials for research, including the extensive working and reference mineral collections of Theodore D. Rand and George Vaux, Jr. The Department is also a map repository for the U.S. Geological Survey and the Defense Mapping Agency.

In addition, students use the resources of the Philadelphia area: the Philadelphia Museum of Art, the Pennsylvania Academy of the Fine Arts, the Barnes Foundation, the Rodin Museum, the Rosenbach Museum, and the University Museum of the University of Pennsylvania. They take advantage of the musical life of the city by attending the Philadelphia Orchestra and by playing or singing with local groups.

Laboratories, classrooms, and libraries for Biochemistry, Biology, Chemistry, Geology, Mathematics, and Physics are located in the three buildings of the Science Center. At the Center are rooms designed for work with radioactive materials, for photomicrography and for glassblowing; there is a machine shop with expert instrument makers in charge and a workshop available to graduate students. Laboratories and classrooms for Anthropology and Psychology are in Dalton Hall. In addition to the usual equipment, apparatus and instruments for particular research projects by faculty and graduate students have been acquired, in part, through the Plan for the Coordination of the Sciences (see page 89), through research grants from industry and other private sources, and from government agencies.

In 1979-80 the College acquired a Hewlett-Packard 3000 computer, featuring 768 kbytes memory and 250 mbytes mass storage, tape drive, card reader and two printers. Interactive computing is supported through fifteen or more typewriter-like terminals on campus. The languages APL and FORTRAN are available, as well as the packages from IMSL (International Mathematical and Statistical Library), SPSS (Statistical Package for the Social Sciences), BMDP

(biomedical statistical package from UCLA), and DYNAMO (Dynamic Modelling language). Bryn Mawr is a member of the UniColl Corporation, a regional computer consortium in Philadelphia which provides the resources and technical support of a major facility, offering access to a pair of IBM 370/168 computers and a library of languages and applications.

Program of Study

The program of study consists of selected seminars, courses, or individual work under the close direction of members of the faculty. For the sake of convenience, this program is divided into academic units which are to be completed at Bryn Mawr College. Three academic units constitute a full year's program. An academic unit may be a year's seminar or two semester seminars, one or more undergraduate courses for graduate credit, independent study in preparation for the Preliminary Examinations, or supervised units of work.

A minimum of three academic units at Bryn Mawr is required for the degree of Master of Arts. Candidates for the degree of Doctor of Philosophy generally complete three full years of graduate work which must, with certain exceptions, include a minimum of six academic units at Bryn Mawr (see degree requirements, p. 14).

For the list of advanced undergraduate courses which with additional work may be accepted as graduate units subject to the approval of department chairmen and the Dean of the Graduate School of Arts and Sciences, see the departmental offerings beginning on page 17.

In many departments, members of the faculty and graduate students meet from time to time in Journal Clubs or Colloquia to discuss current research or to review recent publications in their field of study.

Under the Reciprocal Plan, courses at the University of Pennsylvania Graduate School of Arts and Sciences are available to Bryn Mawr graduate students. All full-time students and such part-time students as intend to become candidates for degrees are eligible. The number of courses which may be taken at the University is limited to the equivalent of one unit per year. The procedure for registration and payment of tuition fees is the same as for students enrolled wholly at Bryn Mawr, with the exception that the student must present a letter of introduction to the Dean of the Graduate School of Arts and Sciences of the University of Pennsylvania when registering there. The University charges a small general fee for the use of the library, a library deposit, which is refundable, and fees for late registration. Ordinarily students are not advised to undertake such work during their first year at Bryn Mawr.

Summer Work

Bryn Mawr has no regular summer session on campus. Occasionally, at the invitation of members of the faculty, arrangements can

be made for graduate students to continue research during the summer. The amount of credit for the work and the tuition fee to be charged depend upon the particular circumstances. Students should register for such work at the Office of the Dean of the Graduate School of Arts and Sciences early in June.

Summer Institutes in France and Spain

Institut d'Etudes Françaises d'Avignon

Bryn Mawr College offers a summer program of intensive work in significant aspects of French culture at the *Institut d'Etudes Françaises d'Avignon*. Certain courses carry graduate credit. For information write to Dr. Michel Guggenheim, Department of French, Bryn Mawr College.

Centro de Estudios Hispánicos

For a similar summer program in aspects of Hispanic culture at the *Centro de Estudios Hispánicos* in Madrid, write to Dr. Eleanor K. Paucker, Department of Spanish, Bryn Mawr College.

Massenzia

Bryn Mawr College has a graduate residence center in Rome, Massenzia, Via Appia Pignatelli 62, Roma 00178, presently under the direction of Professor Kyle M. Phillips, Jr. Graduate students of Bryn Mawr College and other academic institutions can reside at the center while engaged in research and writing. They participate in the lecture program and visits to special sites and monuments organized by Massenzia. Massenzia fellowships are available to Bryn Mawr students, see pages 89-90.

Degree Requirements

The Graduate School of Arts and Sciences offers programs leading to the degrees of Doctor of Philosophy and Master of Arts.

The Degree of Doctor of Philosophy

The course of study is designed to prepare students for professional careers as scholars and teachers. Candidates should have ability of high order, intellectual curiosity, critical judgment, independence, a broad general education, fundamental training in the major and allied fields, and the determination needed to carry through an exacting program.

The general requirements, to which should be added those of the various departments, are as follows:

1. Undergraduate preparation in major and allied fields which is satisfactory to the departments concerned and to the Council of the Graduate School of Arts and Sciences.

2. A minimum of three full years of work beyond the A.B. degree in major and allied fields. Graduates of other colleges must complete at least six academic units at the Graduate School of Arts and Sciences of Bryn Mawr College. (Residence Requirement). Each doctoral candidate must complete at least one unit of supervised work on the dissertation. This unit may be part of (but often is taken in addition to) the six units of the residence requirement. The residence requirement may be reduced by the Council of the Graduate School of Arts and Sciences for candidates who have held academic appointments for two or more years at Bryn Mawr College and occasionally for others. Students who hold the A.B. degree from Bryn Mawr College must complete a minimum of three academic units at Bryn Mawr.

3. The recommendation of the student as a candidate by the director of the dissertation and the major department and the acceptance of the recommendation by the Council of the Graduate School of Arts and Sciences. Application for candidacy, on a form to be obtained at the Office of the Dean of the Graduate School of Arts and Sciences, may be made as early as the spring of the student's first year, provided that the student has been registered for two units of graduate work at Bryn Mawr.

4. Knowledge of the foreign languages, computer languages (such as FORTRAN, ALGOL, PL/I, etc.), and special techniques (such as statistics) required by the individual departments. In certain circumstances, students whose native language is not English may

offer English for one of the languages. These requirements must be fulfilled before the student takes the Preliminary Examinations.

5. Satisfactory Preliminary Examinations in the fields established for the candidate. These examinations are intended to test the candidate's knowledge of the principles of the subject, exemplified by the command of several fields or areas, the ability to apply knowledge to new problems, and power of organization.

6. The preparation of a dissertation worthy of publication, which presents the results of independent investigation in the fields of the major subject and contains original material, results, or interpretations.

7. A satisfactory Final Oral Examination devoted to the dissertation and the special field in which it has been written.

8. The publication of the dissertation in whole or in part. Micro-filming is accepted as a method of publication.

A special pamphlet describing regulations for the Ph.D. degree will be issued to students applying for candidacy.

The Degree of Master of Arts

The general requirements for the M.A. degree are as follows:

1. Undergraduate preparation in major and allied fields which is satisfactory to the departments concerned.

2. A knowledge of one modern foreign language and such additional foreign languages or special techniques as the individual departments may require. Students whose native language is not English, except for those majoring in the language and literature of their native tongue, are not required to present an additional language.

3. The completion of a satisfactory program of work endorsed by the department and accepted by the Council of the Graduate School of Arts and Sciences. Application for such endorsement must be submitted on appropriate forms to the Dean of the Graduate School of Arts and Sciences not later than one week after the beginning of the second semester of the academic year in which the candidate wishes to take the degree. The program of study must include three units of work: (1) one seminar or graduate course, (2) a second seminar or supervised unit of graduate work, (3) a third seminar or an undergraduate course recommended by the major department. If undergraduate courses are included in this last unit, they must be supplemented by additional individual work. Only one such course may be offered for the M.A. degree. Under certain circumstances advanced undergraduate courses in science can be counted as seminars, subject to the approval of the department and the Dean of the Graduate School of Arts and

Sciences. Candidates whose major department conducts a Journal Club or Colloquium are expected to include it in their program.

4. The preparation of a paper in a special field normally related to one of the seminars or units of graduate work in the candidate's program. Candidates currently at Bryn Mawr College shall submit this paper by the date set by the department. Candidates not currently on campus must submit the paper 30 days before Commencement in the academic year of their candidacy.

5. Each candidate, after all other requirements have been completed, must pass a Final Examination.

6. Work for the degree may be spread over several years which need not be in succession but must be included in a five-year period (60 months).

Graduate Program in Arts and Sciences 1980-1981

Graduate Seminars and Courses

Graduate seminars and courses vary from year to year. Undergraduate courses which may with additional work be offered for graduate credit are listed by number. The letter "a" following a number indicates a half-course given in the first semester; the letter "b" following a number indicates a half-course given in the second semester; the letter "c" following a number indicates a half-course given two hours a week throughout the year.

Special graduate requirements are listed under each department. For the general degree requirements for the M.A. and the Ph.D., see pages 14-16.

Anthropology

Professor: Jane C. Goodale, Ph.D.†

Associate Professors: Philip L. Kilbride, Ph.D., *Chairman*
Judith R. Shapiro, Ph.D.†

Assistant Professor: Richard H. Jordan, Ph.D.

Lecturer: Richard S. Davis, Ph.D.

Professor of Linguistics in Anthropology and German:
Nancy C. Dorian, Ph.D.

Visiting Lecturer: Frederica de Laguna, Ph.D., (semester II, 1980-81)

Prerequisites: A good undergraduate preparation in Anthropology or a closely related discipline is desirable. Scores of the Graduate Record Examination Aptitude Test are required for admission. Students whose undergraduate training is not entirely adequate will be required to take such undergraduate courses as may seem necessary.

† On leave semester II

‡ On leave 1980-81

Language Requirements. Candidates for the M.A. or Ph.D. must offer one of the following two options: (1) two modern languages (French, German, Russian, Spanish) or (2) one modern language (French, German, Russian, Spanish) and statistics or computer science. Language skills will be tested by examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr. Competence in statistics and computer science will be acknowledged when the student satisfactorily passes an approved graduate course in statistics or computer science. The statistics requirement may also be fulfilled by passing an examination administered by the Department.

Program and Examination for the M.A. For students with an excellent undergraduate preparation, the program may consist of a minimum of three units of work in seminars or advanced undergraduate courses arranged for graduate credit, one of which may be in an allied subject. The program usually takes two years. The M.A. paper may be based on an essay offered in a seminar. The Final Examination consists of one four-hour written examination, but the Ph.D. Preliminary Examinations may be substituted for the M.A. Examination. All graduate students are expected to take the M.A. before proceeding to the Ph.D. Those who enter Bryn Mawr College with an M.A. in Anthropology may petition the Department to proceed directly to the Ph.D. program.

Program and Examination for the Ph.D. The Department emphasizes the holistic nature of the anthropological discipline and will expect each student to become familiar with various cultural, social, and archaeological approaches and the anthropology of at least two geographical regions, in addition to areas and topics of professional specialization.

The preliminary Examinations for candidates for the Ph.D. (usually taken near the end of the third year of graduate work) will consist of three four-hour written examinations and an oral examination of one hour. Students must also have a research proposal approved by the supervising committee.

Since the dissertation is usually based upon field work, it is difficult for a student to obtain the degree in less than five years.

General Degree Requirements for the M.A. and the Ph.D. See pages 14-16.

SEMINARS AND GRADUATE COURSES

Four or five seminars are offered each semester. Rarely is the same seminar offered in consecutive years in order to allow the greatest

possible choice and variety to each student over a two- to three-year period. For advanced students units of supervised readings are sometimes substituted for seminars. Topics listed below indicate the areas in which seminars will be offered according to the needs of students.

Mr. Davis

Paleoecology

Miss Dorian

Linguistic Techniques and Field Methods

Socio-Linguistics

Miss Goodale

Topics in Oceanic Ethnography (Australia, Melanesia, Polynesia and Micronesia)

Methods in Ethnographic Research

Social Organization

Mr. Jordan

Arctic Archaeology

Environmental Archaeology

History of Archaeological Theory

Human Evolution and Old World Prehistory

Mr. Kilbride

Topics in African Ethnography

Psychological Anthropology

Cultural Dynamics and Modernization

Quantitative Methods of Analysis

Miss Shapiro

Topics in Lowland South-American Ethnography

Sex Roles

Linguistic Anthropology

Topics in Social and Cultural Theory

Missionization

SELECTED UNDERGRADUATE COURSES

- 302 *Africa: Sub-Saharan Ethnology*: Mr. Kilbride
- 303 *Oceania: Topics in Melanesian Ethnography*: Miss Goodale
- 305 *Native Cultures of South America*: Miss Shapiro
- 308 *Language in the Social Context*: Miss Dorian
- 313 *Linguistic Anthropology*: Miss Shapiro
- 314 *Comparative Hunters and Gatherers*: Mr. Davis

- 320 *Cultural Theory*: Mr. Davis
321 *Psychological Anthropology*: Mr. Kilbride
324 *Cultural Ecology*: Mr. Jordan

In addition, courses at the University of Pennsylvania are available under the terms of the Reciprocal Plan (see page 12).

Biochemistry

Committee on Biochemistry:

Professor of Biology: Robert L. Conner, Ph.D.

Professor of Chemistry: George L. Zimmerman, Ph.D.

Associate Professor of Biology: David J. Prescott, Ph.D., *Chairman*

Assistant Professor of Chemistry: Kenneth G. Strothkamp, Ph.D.†

This interdisciplinary program offers work within the Departments of Biology and Chemistry and leads to the M.A. or Ph.D. degree. It is administered by the Committee on Biochemistry, which consists of members of the two departments. Depending on their backgrounds and interests, students may enter the program either through the Department of Biology or the Department of Chemistry.

Prerequisites. Undergraduate degree with a major or its equivalent in either Biology or Chemistry.

Major and Allied Subjects. Students will receive their advanced degrees in either Biology or Chemistry with a major in Biochemistry. The allied field will usually be a branch of Biology or Chemistry different from Biochemistry. It may also be selected from fields in Biophysics, Physics, Mathematics, or Psychology. Other combinations may be accepted with the approval of the Committee and the Council of the Graduate School of Arts and Sciences.

Language Requirements. See the requirements set by each department.

Program and Examination for the M.A. Students who are candidates for the M.A. will usually offer one unit of seminar or course work in either Biology or Chemistry and an additional unit of work in Biochemistry. A third unit of work consists of an experimental

†On leave 1980-81

investigation carried out under the direction of a member of either department. The results of this unit must be made the subject of a written paper. The Final Examination consists of a four-hour written examination or a three-hour written and one-hour oral examination.

Program and Examinations for the Ph.D. All students must take the core curriculum in Biochemistry, which includes Biochemistry 353a and b, or its equivalent if taken elsewhere, and a series of graduate courses and seminars in Biochemistry. Students should note that one semester of physical chemistry emphasizing thermodynamics is a pre- or co-requisite for admission to the graduate courses in Biochemistry. At least one-half unit of physiology, cell biology, genetics, or developmental biology is also required. In addition, students will usually take other graduate courses or seminars, depending on their interests, in either department in order to acquire a broad general background for research or teaching in Biochemistry. They will usually devote a large portion of their time to research carried out under the direction of a member of the Committee on Biochemistry. The Preliminary and Final Examinations are taken in accordance with the regulations set by the department in which the student is enrolled.

General Degree Requirements for the M.A. and Ph.D. See pages 14-16.

SEMINARS AND GRADUATE COURSES

See listings under the Departments of Biology and Chemistry.

SELECTED UNDERGRADUATE COURSES

See listings under the Departments of Biology and Chemistry.

Biology

Professor: Robert L. Conner, Ph.D., *Chairman*

Associate Professors: Anthony R. Kaney, Ph.D.
David J. Prescott, Ph.D.

Lecturer: Patricia Onderdonk Pruett, Ph.D.

Assistant Professor of Chemistry: Kenneth Strothkamp, Ph.D.†

† On leave 1980-81

Prerequisites. An undergraduate major in Biology, Zoology, or Botany, including courses in general and organic chemistry. Some college-level preparation in Mathematics and Physics is desirable. Students with majors in other subjects may be admitted but will be required to make up any deficiencies in their preparation in Biology before being admitted to graduate courses. All applicants should submit scores from the Graduate Record Examination Aptitude Test and the Advanced Test in Biology.

Major and Allied Subjects. Candidates for the M.A. and Ph.D. degrees may specialize in cell biology, cellular physiology, developmental biology, genetics, molecular biology, neurochemistry, or neurophysiology, but must take work also from areas not chosen for specialization. Candidates may also major in biochemistry through the Biochemistry Program (see page 20). Allied subjects may be selected from fields in Chemistry, Physics, and Psychology, and in special cases from other related fields, with the approval of the Council of the Graduate School of Arts and Sciences.

Language Requirements. Candidates for the M.A. degree should offer French, German, or statistics. Candidates for the Ph.D. degree must offer two foreign languages: French and German (or some other language by special permission of the Department and the Council of the Graduate School of Arts and Sciences), or one foreign language and statistics. The statistics requirement may be satisfied by passing a graduate course in statistics at Bryn Mawr or by examination administered by the Biology Department. Language skills will be tested by the examinations administered by Bryn Mawr College.

Program and Examination for the M.A. One full year, or its equivalent, of course work in seminars and advanced undergraduate courses arranged for seminar credit and a written report on a piece of experimental work carried out under the direction of a member of the Department. Qualified students may substitute a unit of supervised research for formal course work. The Final Examination consists of a three-hour written examination covering the areas of study and a one-hour oral examination concentrating particularly on the interpretation and significance of the experimental problem and its relation to biology more generally.

Program and Examinations for the Ph.D. The Preliminary Examinations for the Ph.D. consist of three written examinations, each of four hours' duration, and an oral examination of one to two hours. These examinations will cover the areas included in the course work in the major and allied fields. After the subject of the dissertation has been decided, the student will meet with the faculty of the Department to outline and discuss the subject and the proposed

plan of research. The Final Examination is oral, covering the subject of the dissertation in relation to the general field of Biology.

General Degree Requirements for the M.A. and Ph.D. The Department expects all graduate students to become biologists who are professionals both in research and in education. It is anticipated that all graduate students will gain experience in teaching, usually in the capacity of a teaching assistant. See also pages 14-16.

Cooperation with the Medical College of Pennsylvania. Students formally enrolled in the Graduate Program in Biology at Bryn Mawr College or in the Graduate School of Medical Sciences of the Medical College of Pennsylvania will be permitted to take one graduate course per semester at the counterpart institution for credit and without payment of additional tuition or fees.

Graduate courses may be offered in which the instruction is shared by faculty members of the Biology department of Bryn Mawr College and the GSMS/MCP. In each case, one member of either faculty will serve as course director. In 1980-81, a joint course will be offered on Molecular Aspects of Cell Structure and Function.

GRADUATE COURSES

Mr. Prescott

Advanced Biochemistry—semester I

A detailed examination of the structure and function of selected proteins. Physical and chemical means of determining the structure of macromolecules will be emphasized. Two hours' lecture. Prerequisite or equivalent—Interdepartmental 353a and b. Prerequisite or co-requisite or equivalent—semester I of Chemistry 203.

Mr. Strothkamp

Advanced Biochemistry—semester II

The kinetics and mechanisms of several enzyme systems will be examined in detail. Metalloenzymes will be emphasized. Two hours' lecture.

Faculty of Biology Department and Medical College of Pennsylvania

Molecular Aspects of Cell Structure and Function—
semester I and II

This course is designed to provide an introduction to current concepts in molecular and cellular biology to individuals who have had some previous undergraduate training in biology and/or chemistry. The course will be particularly useful to individuals who are considering re-entry into graduate programs in

the biological sciences. A series of integrated lectures on cellular organization, structure and function will provide an interdisciplinary overview of biochemistry, cell and molecular biology, microbiology, immunology, genetics and pathology. The course will be divided into four sections:

- I. Cellular Biology and Biochemistry
- II. Viruses, Bacteria and Eukaryotic Cells
- III. Cellular Genetics
- IV. Molecular Aspects of the Disease State

For Statistics: See offerings in the Graduate School of Social Work and Social Research and the Department of Psychology.

Journal Club: All faculty members and graduate students meet each week for presentation of current research in Biology. Graduate students, faculty, and outside speakers will participate.

SEMINARS

All seminars and advanced undergraduate courses arranged for seminar credit are offered for one semester each year. Four seminars are offered each year, with each area being offered in alternate years. The topics considered in any semester are selected in accordance with the needs and desires of the students enrolled. A list of seminar topics offered in each area in recent years is given below:

Cellular Physiology

- Membrane Structure and Function
- Regulation of Lipid Metabolism
- Molecular Endocrinology

Genetics

- Somatic Cell Genetics
- Genetics of Ciliated Protozoans
- Structure and Function of the Chromosome

Developmental Biology

- Gametogenesis and Development
- Fertilization
- Sex Differentiation

Biochemistry

- Neurochemistry
- Protein Structure and Chemistry
- Peptide Hormones

Neurophysiology

Organization of Motor Systems

Cyclic Nucleotide Involvement in Neural Functioning

SELECTED UNDERGRADUATE COURSES

The following advanced undergraduate courses with supplemental work may be taken for graduate credit:

350b *Problems in Cell Physiology*: Mr. Conner351a *Problems in Genetics*: Mr. Kaney353 *Biochemistry*: Mr. Conner, Mr. Prescott, Mr. Strothkamp355a *Problems in Neurophysiology*358a *Analysis of Development*362a *Cellular Physiology*: Mr. ConnerInt. 357a *Computer Usage in the Life Sciences*: Mrs. Pruett

Chemistry

Professors: Jay Martin Anderson, Ph.D., *Director of Computing Services*

Ernst Berliner, Ph.D., *Chairman*Frank B. Mallory, Ph.D., *Academic Deputy to the President*

George L. Zimmerman, Ph.D.

Associate Professor: Joseph Varimbi, Ph.D.*Assistant Professors*: Geraldine Richmond, Ph.D.

Kenneth G. Strothkamp, Ph.D.†

Charles S. Swindell, Ph.D.

Lecturers: Frances Bondhus Berliner, Ph.D.*Associate Professor of Biology*: David J. Prescott, Ph.D.

Fields of Study and Research. The primary aim of the instruction of graduate students in the Department of Chemistry is to provide a sound background in modern chemistry and to prepare men and women for a professional career in academic or industrial research or in teaching. Courses and seminars are offered to enable the students to acquire a command of their chosen fields, in addition to a sufficiently broad general background so that they will be prepared

† On leave 1980-81

for the variety of assignments in chemistry teaching or research which they may later encounter. Thesis research is the major part of the training. Research training is centered on a variety of investigations carried out by the members of the faculty. Currently there are active research programs involving both faculty and students in the following areas of organic, inorganic, physical, and theoretical chemistry, and of biochemistry: kinetics of electrophilic substitution and addition, relative reactivities of polynuclear aromatic systems, organic photochemistry, nuclear magnetic resonance as applied to substituent effects and through-space nuclear coupling, synthetic organic chemistry, synthesis of naturally occurring alkaloids and related compounds, study of amine oxide stabilized carbanions, reactions and electrochemical studies in liquid ammonia and other non-aqueous solvents, gas phase and solution photochemical isomerization and dissociation and molecular spectroscopy, theoretical quantum chemistry and nuclear magnetic relaxation, laser optoacoustic spectroscopic studies of weak absorption, two-photon absorption, and photoisomerization in liquids, structure and function of copper proteins, evolution of metalloproteins, and binding of metal ions to nucleic acids.

Under the Plan for the Coordination of the Sciences there are special opportunities for research and training in such interrelated areas as geochemistry, chemical physics, etc. See page 89.

Prerequisites. An undergraduate preparation in chemistry including courses in inorganic, analytical, organic, and physical chemistry, college physics, and mathematics (calculus). All applicants should submit scores on the Graduate Record Examination Aptitude Tests and Advanced Test in Chemistry. Applicants lacking some of these prerequisites may be considered for admission under special circumstances in consultation with the Department.

Major and Allied Subjects. Students may specialize in organic, inorganic, or physical chemistry; they may also specialize in biochemistry within the biochemistry program. See page 20. The allied subject for the Ph.D. may be chosen from the fields of mathematics, physics, inorganic geology, biology, and a branch of chemistry different from that of the major subject. Other combinations may be accepted with the approval of the Council of the Graduate School of Arts and Sciences and on the recommendation of the Department. The typical work for the allied subject would be a year's course or seminar on an approved level.

Language Requirements. Candidates for the M.A. must offer German, French, or Russian. Candidates for the Ph.D. may offer two of the following: German, French, Russian, or demonstrated skill

in digital computation, numerical analysis, and the theory of error. This skill is tested by an examination consisting of two parts, a practical part requiring the writing and successful execution of a FORTRAN (or other equivalent language) program and a written description of the mathematical basis and a documentation of the program, or by a satisfactory grade in an appropriate course.

Language skills will be tested by examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

Program and Examination for the M.A. Students who are candidates for the M.A. will usually offer one seminar in their special field, another seminar or advanced undergraduate course in chemistry or an allied field, and one unit of research. This unit consists of an experimental or theoretical investigation carried out under the direction of a member of the Department. The Final Examination consists of a four-hour written examination or a three-hour written and one-hour oral examination.

Program and Examinations for the Ph.D. Ph.D. students will normally be expected to devote a large portion of their time to experimental or theoretical research carried out under the direction of a member of the Department. They will usually take all seminars offered in their special fields during their stay at Bryn Mawr, in addition to such courses as will give them a broad background in chemistry. The Preliminary Examinations will normally be taken in the student's third year of graduate study. They consist of two four-hour written examinations and two oral examinations. The two written examinations will be from the candidate's major field. One will be an examination in the general aspects of that field. The second will be in the special field of the candidate's research and will include questions designed to test familiarity with, and ability to interpret, material from the recent chemical literature. One of the oral examinations will be held soon after the written examinations have been completed and will be for the purpose of clarifying and augmenting the candidate's responses on the two written examinations. The three examinations described so far must be completed within a period of five weeks. The other oral examination will involve the defense of two original chemical research proposals previously submitted by the candidate. No more than one of these proposals may deal with work related to the special field of the student's research. All four of the examinations must be completed within a period of one year.

The Final Examination is oral and is devoted to the subject matter of the student's dissertation.

General Degree Requirements for the M.A. and the Ph.D. See pages 14-16.

Colloquium. All members of the Department and the graduate students meet every week for a presentation of current research in chemistry, usually by outside speakers.

SEMINARS AND GRADUATE COURSES

In order to meet the needs of the students and to offer them as wide a selection of topics as possible, the seminars are arranged in such a way that each one is usually given at least once within a three-year period. The topics listed below are given in one-semester seminars, counting one-half unit of credit each. Ordinarily four seminars are offered each year. Individual programs are flexible, and the contents of the seminars are likely to vary with the research interests of the students and the current research activities of the faculty.

The seminars listed below are illustrative of those that have been offered in recent years.

Mr. Anderson

Theoretical Quantum Chemistry

Non-equilibrium Thermodynamics

Mr. Berliner

Physical Organic Aspects of Aromatic Chemistry

Physical Organic Chemistry

Structure and Physical Properties of Organic Compounds

Mr. Mallory

Organic Photochemistry

Spectral Applications in Current Organic Chemistry

Mr. Varimbi

Special Topics in Inorganic Chemistry

Statistical Thermodynamics

Mr. Strothkamp

Spectroscopic Methods for Studying Biological Macromolecules

Occurrence and Function of Metal Ions in Biological Systems

Mr. Zimmerman

Surface Chemistry

Theory of Radiative and Non-radiative Transitions

Photochemistry

For additional seminars in Biochemistry, see the Department of Biology.

SELECTED UNDERGRADUATE COURSES

The following advanced undergraduate courses may be taken for graduate credit:

- 301b *Advanced Inorganic Chemistry*
- 302 *Advanced Organic Chemistry*
- 303a *Quantum Mechanics of Atoms and Molecules*
- 303b *Atomic and Molecular Spectroscopy*
- 353 *Biochemistry*
- 356b *Biochemical Mechanisms*

Classical and Near Eastern Archaeology

Professors: Machteld J. Mellink, Ph.D., *Chairman*
 Kyle M. Phillips, Jr., Ph.D., *Resident Director*
of Massenzia, Rome
 Brunilde S. Ridgway, Ph.D.

Associate Professor: Richard S. Ellis, Ph.D.*

Assistant Professors: James C. Wright, Ph.D.
 Kathleen S. Wright, Ph.D.†

Lecturer: Gloria F. Pinney, Ph.D.

Professor of Classical and Near Eastern Archaeology
and of History of Art: Phyllis Pray Bober, Ph.D.

Prerequisites. An undergraduate major in Archaeology or at least two courses in Archaeology or Ancient Art combined with a major in History of Art, Anthropology, Greek, Latin, or Ancient History. It is expected that students of Classical Archaeology will have a basic knowledge of Greek, Latin, and ancient history, and a reading knowledge of German and French (or Italian). For students of Near Eastern Archaeology the prerequisites are ancient history and a reading knowledge of German and French (or Italian); some preliminary study of an ancient Near Eastern language is desirable. Each application will be judged individually on its aims and soundness of preparation. All applicants must submit scores of the Aptitude Test of the Graduate Record Examinations.

* On leave semester I 1980-81

† On leave 1980-81

Fields of Study and Allied Subjects. There are two fields of concentration: 1. The art and archaeology of the Greek and Roman world and its Mediterranean predecessors; 2. the art and archaeology of the ancient Near East. These fields may be combined in a program of major and allied subjects. Allied subjects are ancient languages (Greek, Linear B, Latin, Sumerian, Akkadian, Ugaritic, Hebrew, Hittite, Egyptian), ancient history, History of Art, Anthropology, or a science related to the program of the student.

Language Requirements. For the M.A. and Ph.D., a good reading knowledge of German and French. For the Ph.D., a reading knowledge of one ancient language. Modern language skills will be tested by examinations administered by Bryn Mawr College.

Program and Examination for the M.A. Three units of work in Archaeology or in Archaeology and an allied field; a research paper prepared under the supervision of a departmental adviser; three hours of written examination concerning the field in which the research paper was undertaken; one hour of oral examination to discuss the results. This M.A. is a prerequisite for the Ph.D. program and will normally take two years to complete.

Program and Examinations for the Ph.D. After completion of the M.A. program students continue to take seminars and supervised work in preparation for the Preliminary Examinations and the Ph.D. dissertation. A program of study is designed for each individual student in consultation with the Department. Four special fields of study (one of which may be an allied field) are prepared for the Preliminary Examinations. The examinations consist of four four-hour papers and an oral examination.

All graduate students are encouraged to spend their third or fourth year of graduate study abroad. Students in Classical Archaeology are advised to spend a year at the American School of Classical Studies in Athens. For study in Italy, Bryn Mawr College now sponsors Massenzia, a graduate study center in Rome. Students of Near Eastern Archaeology will be advised to attend a center of archaeological research in their area of concentration. Museums in Europe and the Near East should be visited in the course of the year(s) spent abroad. Participation in excavations under the auspices of Bryn Mawr College or other schools is arranged when possible.

Depending upon individual study programs, the Preliminary Examinations are normally taken at the end of the third or in the course of the fourth year of graduate study.

General Degree Requirements for the M.A. and the Ph.D. See pages 14-16.

Excavations. The Department has sponsored excavation projects in Turkey and Italy. At present two projects are nearing the stage of completion.

- I. An investigation of the Bronze Age habitation of ancient Lycia in Southwestern Turkey, and of painted tomb chambers in this area. The final publication is being prepared on the basis of joint field reports by the participants (cf. *American Journal of Archaeology* annual reports from 68 [1964] to 80 [1976], most recently 80 [1976] pp. 377-391.
- II. The Etruscan project, started in 1966, is the excavation of the archaic site of Murlo near Siena, organized in cooperation with the Archaeological Museum in Florence. Selected students participate during the summer in field work and study of excavated material (cf. *American Journal of Archaeology* annual reports from 71 [1967] to 81 [1977], most recently 81 [1977] pp. 85-100.
- III. A new project in Eastern Turkey is under consideration for the years 1980-1985. A site on the West bank of the Euphrates has been tentatively chosen as an objective for rescue and training excavations under the direction of members of the Department.

Cooperation with the University of Pennsylvania. Attention is drawn to the courses offered by the Departments of Classical Archaeology, Anthropology, History of Art, Oriental Studies, and Biblical Archaeology at the University of Pennsylvania. Under the Reciprocal Plan (see page 12), students may register for a unit of work at the University or pursue research at the University Museum.

SEMINARS AND GRADUATE COURSES

Seminar topics are determined for each semester in consultation with the graduate students. Seminars offered in recent years include the following:

Mrs. Bober

The Survival of Antiquity in the Renaissance
Roman Sarcophagi, Problems in Style and Iconography

Mr. Ellis

Archaeology of Ur
Problems of Ancient Technology
Mesopotamian and Syrian Sculpture
Syro-Hittite Art
Syro-Phoenician Metalwork and Ivories

Miss Mellink

Wall Painting in the Ancient Near East
The Early Bronze Age in Anatolia
Anatolian Architecture
Field Seminar in Anatolia
Minoan and Mycenaean Religion

Mr. Phillips

Greek Vase Painting
Corinthian Pottery
The Western Greeks
Etruscan Archaeology

Mrs. Pinney

Athens in the Seventh Century B.C.
East Greek Pottery
Greek Vase Painting
Etruria in the Sixth Century B.C.
Ancient Monumental Painting

Mrs. Ridgway

Roman Copies of Greek Sculpture
Greek Sculpture of the Fifth Century B.C.
Hellenistic Sculpture
Architecture of Magna Graecia
Julio-Claudian Sculpture

Mr. Wright

Fourth Century Peloponnesian Architecture
Minoan Burial Customs
Mycenaean Citadels
The Early Bronze Age in the Aegean
Problems in Greek Architecture

Mrs. Wright

Delos
Colonies and Cities in Roman Greece
The Near East in Hellenistic and Roman Times
Problems in Roman Pottery Trade

SELECTED UNDERGRADUATE COURSES

Incoming students with incomplete preparation in Archaeology will be advised to take selected undergraduate courses (with additional work for graduate credit) during their first years in graduate school.

201b *Egypt and Mesopotamia Before 1600 B.C.*: Mr. Ellis

203a *Greek Sculpture*: Mrs. Ridgway

203b *Hellenistic and Roman Sculpture*: Mrs. Pinney

- 205a (History) *The Ancient Near East*: Mr. Ellis
- 205b *Aegean Archaeology*: Mr. Wright
- 206a *Egyptian Archaeology*: Mr. Ellis
- 301b *Greek Vase-Painting*: Mrs. Pinney
- 302a *Greek Architecture*: Mr. Wright
- 304b *Monumental Painting*: Mrs. Pinney

Economics

Professor: Richard B. Du Boff, Ph.D., *Chairman*

Associate Professors: Noel J. J. Farley, Ph.D.
Helen Manning Hunter, Ph.D.

Lecturer: Frances E. Altvatter, A.B.

Prerequisites. An undergraduate major in Economics, with work in such related fields as History and Political Science. Superior applicants with majors in other disciplines may be admitted. Applicants must submit scores on the Aptitude Test and Advanced Tests of the Graduate Record Examinations. Students whose undergraduate training in Economics is incomplete may be required to take such undergraduate courses as the Department thinks necessary.

Allied Subjects. Most subjects in the other social sciences and in History and Philosophy are acceptable. Mathematics and statistics are necessary to advanced work in Economics.

Language Requirements. Candidates for the M.A. and Ph.D. must show reading proficiency in one modern foreign language. Candidates for the Ph.D. must in addition show either reading proficiency in a second modern foreign language or proficiency in Mathematics beyond the level required for admission to graduate seminars in Economics (i.e., beyond the level of first-year college calculus and basic linear algebra). Mathematical skills will be tested by an examination to be set by the Department. The topics to be covered will be agreed upon in advance and may vary according to the student's particular field of interest in Economics.

Language skills will be tested by examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

Program and Examination for the M.A. It is expected that the work for the M.A. degree will require not less than one calendar

year of graduate study. All candidates for the M.A. degree must complete three units of formal course work (seminars, courses, and supervised units) prior to submitting the M.A. research paper. One of these units must be in economic theory, one in statistics and econometrics, and one in the student's special field of interest. Course examinations in each of these three fields must be passed before the candidate presents the research paper. After acceptance of the paper a Final Examination must be passed.

Program and Examinations for the Ph.D. Candidates for the Ph.D. will take as much formal course work as is necessary to prepare them for the Ph.D. examinations. The Preliminary Examinations will consist of four three-hour written papers and an oral examination; one of the written papers will be in microeconomic analysis and one in macroeconomic analysis; the other two papers will be in fields related to the candidate's major interest. The Final Oral will be devoted to the subject matter of the dissertation.

General Degree Requirements for the M.A. and the Ph.D. See pages 14-16.

SEMINARS

Seminars are chosen each year from the following topics:

Mr. Du Boff

American Economic Development
Economic History and Growth 1750-1970

Mr. Farley

International Economic Development
International Trade Policy
International Trade Theory

Mrs. Hunter

Econometrics
Macroeconomic Analysis
Monetary Theory and Institutions

Miss Altvatter

Corporate Financial Theory
Industrial Organization
Microeconomic Analysis
Public Finance

Education and Child Development

Professors: Janet L. Hoopes, Ph.D., *Director*
Child Study Institute
Ethel W. Maw, Ph.D., *Chairman*

Associate Professors: Susan E. Maxfield, M.S., *Director*
Phebe Anna Thorne School
Emmy A. Pepitone, Ph.D.
Faye P. Soffen, Ed.D. §

Lecturers: Ruth B. Harvey, Ph.D.
Robert H. Wozniak, Ph.D.

The program emphasizes extensive knowledge of human development in a variety of social contexts to provide the foundation for specialization in college teaching, research, and practice: child clinical development, educational psychology, school psychology, counseling, secondary education, and early childhood education. The typical program of study includes research and field experience in educational and mental health settings as well as participation in seminars.

Bryn Mawr has program approval from the Pennsylvania Department of Education for several curriculum sequences which prepare candidates for public school professions. These courses of study include teacher education in ten liberal arts fields, school psychology, and school counseling, both elementary and secondary. Students who satisfactorily complete an approved program will, on the recommendation of this Department, receive the state certificate in the appropriate field.

Prerequisites. An undergraduate preparation in the liberal arts which must include work in general psychology and statistics. Students whose undergraduate training in psychology is not adequate will be required to take such undergraduate courses as seem necessary. Applicants for admission are asked to submit scores of the Graduate Record Examination Aptitude Test and a statement of their academic plans and goals. Undergraduate grades of at least B level are necessary.

Major and Allied Subjects. The Department offers study in several areas: developmental, educational, social and clinical. The program provides for concentration in several fields within each of these

§ On partial leave 1980-81

areas based on the courses listed below. For the M.A., two fields are required. For the Ph.D., four fields which represent three of the areas must be presented. One field may be an allied field and is individually arranged. Detailed descriptions of fields are available upon request. Field examinations are given once each semester.

Language and Statistics Requirements. For the M.A., students are required to pass an examination in one modern foreign language and demonstrate a working knowledge of descriptive and inferential statistics. For the Ph.D., students are required to demonstrate a reading knowledge of one modern foreign language and competence in statistics. The statistics requirement for both degrees may be satisfied by passing the course *Foundations of Research* at a satisfactory level or by demonstrating equivalent competencies. Language skills will be tested by the examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

Program and Examination for the M.A. Candidates will normally offer three units of graduate work in Education and Child Development, although one of the three may be taken in an allied field. A paper embodying the results of independent research is required. The Final Examination consists of two three-hour written examinations, one in each field offered, and a one-hour oral examination on the M.A. paper.

Examinations for the Ph.D. The Preliminary Examinations consist of four-hour written examinations in each of the fields offered and an oral examination. The Final Examination is an oral examination devoted to the dissertation and the field in which it has been written.

General Degree Requirements for the M.A. and the Ph.D. See pages 14-16.

The Phebe Anna Thorne School and the Child Study Institute. The Phebe Anna Thorne School is maintained by the Department as a laboratory nursery school for normal children where students may observe and assist in the program for three- and four-year-olds. For those preparing for teaching, medical work with children, child welfare or guidance, the school provides opportunity for direct experience with early childhood development. Students preparing for early childhood education spend substantial blocks of time in the Thorne School.

The Department also operates at the College the Child Study Institute, a mental health center where problems of learning and behavior are studied and remedial measures planned and carried

out with parents and children. The service is given by a staff of qualified specialists in child psychiatry, psychology, school counseling, and remedial teaching. Advanced students participate at various levels of responsibility. Referrals from the schools, from physicians, social agencies, and families give students the opportunity for acquaintance with a diversity of clinical material.

A separate building on the college grounds houses the Department, the Thorne School, and the Institute, with rooms equipped for nursery school teaching and for individual examination of pupils, remedial teaching, individual and group therapy, and student observation.

SEMINARS

The seminars offered are selected from the following, (In most cases, laboratory practice is required.) Some seminars are offered in alternate years; some are offered on demand.

Miss Hoopes

Clinical Evaluation

Advanced Theory and Practice in Clinical Evaluation

Assessment in Early Childhood

Mrs. Maw

Foundations of Research

Educational Psychology

Topics in Learning and Instruction

Miss Maxfield

Development in Early Childhood

Developmental Psychology

Early Childhood Education

Theory in Practice: Early Childhood Education

Mrs. Pepitone

History and Philosophy of Education

Social Theories

Family Theory

Issues in Urban Education

Research in Children's Cooperation and Competition

Instructor to be announced

Social and Personality Development

Psychological Disorders of Children

Cognitive Processes and Cognitive Development

Critical Issues in Human Development

Topics in Developmental Psychology

Mrs. Soffen

Principles and Organization of the Guidance Program
The Counseling Process: Theory and Practice
The Group Process in Counseling and Guidance
The Psychology of Occupations
Advanced Theory and Practice in Counseling and Guidance
Counseling with Families and Groups

SELECTED UNDERGRADUATE COURSES

206a *Developmental Psychology*: Mr. Wozniak

207b *Adolescent Development*: Mrs. Harvey

301a *Principles of Teaching in the Secondary School*: Mrs. Maw

Course 301a satisfies the student-teaching requirement of most states. Plans for registration should be made with Mrs. Maw in the spring before the student expects to take the course in the fall.

English

Professor: Robert B. Burlin, Ph.D.†

Associate Professors: Carol L. Bernstein, Ph.D.
Sandra M. Berwind, Ph.D., *Chairman*
Thomas H. Jackson, Ph.D.
Joseph E. Kramer, Ph.D.

Assistant Professors: Peter M. Briggs, Ph.D.
Katrin Ristkok Burlin, Ph.D.
Susan Dean, Ph.D.
E. Jane Hedley, Ph.D.‡
Eileen T. Johnston, Ph.D.
Annette Niemtzow, Ph.D.

Lecturer: Christopher Kendrick, A.B.

Prerequisites. An undergraduate major in English or its equivalent. Applicants should have had some training in at least one other discipline complementary to the study of literature in the English language. All applicants should submit scores in the Aptitude Test of

† On leave semester II

‡ On leave 1980-81

the Graduate Record Examinations and a sample of recent critical writing. Personal interviews, while not required for admission, are encouraged.

Language Requirements. It is hoped that language skills will enrich the student's work in seminars and courses. For the M.A. degree, a knowledge of either French or German adequate to the reading of scholarly and literary texts is required. For the Ph.D., the student must either pass examinations in both French and German or demonstrate superior competence in one by satisfactorily completing one unit of graduate work in that language or its literature at Bryn Mawr College. (In special cases, with the approval of the appropriate language department and of the Department of English, equivalent work at another university may be accepted.) Students working toward the doctorate are also required to have formal training in Latin or Greek. The doctoral candidate should satisfy these requirements by the beginning of the second year of graduate study; they must be satisfied before the candidate will be admitted to the Preliminary Examinations.

With the approval of the English Department, another modern language may be substituted for French or German when it can be shown to be pertinent to a projected dissertation.

Modern foreign language skills will be tested by examinations administered by Bryn Mawr College. The student also has the option of offering scores of the GSFLT. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr College.

Program and Examination for the M.A. Three units of work in English or two in English and one in an allied field. A long paper written under the supervision of a faculty member is required. The Final Examination is written, four hours in length, and on the general field of the M.A. paper.

Program and Examinations for the Ph.D. Work of the Department is carried on primarily through small seminars, supplemented by selected advanced undergraduate courses in which the special needs of graduate students are met, and, for advanced students, supervised units of independent study. Six units of graduate work are required, one of which may be in an allied field. Candidates must spend at least one year in full-time graduate work. The program must include some training in Old or Middle English or in the history of the English language.

After being accepted for doctoral candidacy, the student will take Preliminary Examinations in five parts: four written (four hours each) and one oral (one or two hours). One written examination may be in an allied field. The choice of the four fields will be

determined by the student in consultation with the graduate adviser and the departmental examiners, who will form the Supervising Committee. The candidate is expected to demonstrate a balanced knowledge of different periods.

Before proceeding with the dissertation the doctoral candidate will submit a prospectus to be discussed with the departmental members of the Supervising Committee. The Final Examination is devoted to the dissertation and the field in which it has been written.

Teaching Preparation. The Department offers an apprenticeship program in teaching available to students who have advanced beyond the M.A.

General Degree Requirements for the M.A. and the Ph.D. See pages 14-16.

SEMINARS

Seminars run for one semester. Over a two-year period, opportunity will be offered for seminar study in each of the following fields of English and American Literature.

Medieval Literature: Mr. Burlin

Literature of the Sixteenth Century: Mrs. Hedley

Shakespeare and Renaissance Drama: Mr. Kramer

Literature of the Seventeenth Century: Mr. Kendrick

Restoration and Eighteenth-Century Literature: Mr. Briggs

Fiction: Mrs. Burlin

Nineteenth-Century English Literature: Mrs. Bernstein

Mrs. Johnston

Twentieth-Century Literature: Mrs. Berwind

Mr. Jackson

American Literature: Mrs. Dean

Miss Niemtzow

ADVANCED UNDERGRADUATE COURSES OPEN TO GRADUATE STUDENTS:

- 300 *Old English Literature:* Mr. Burlin
- 301 *Readings in Middle English Literature:* Mr. Burlin
- 315 *Sixteenth-Century Chivalric Romance:* Mrs. Hedley
- 323 *Forms of Renaissance Tragedy:* Mr. Kramer
- 325 *Shakespearean Topics:* Mr. Kramer
- 326 *Theater of Ben Jonson:* Mr. Kramer
- 333 *The Metaphysical Poets: Donne to Marvell:* Mrs. Hedley
- 340 *The Age of Dr. Johnson:* Mr. Briggs
- 352 *Romanticism and Interpretation:* Mrs. Bernstein

- 355 *Major Victorian Poets*: Mrs. Johnston
- 356 *Victorian Literature and the Religious Experience*:
Mrs. Johnston
- 358 *"Women of Talents"*: Mrs. Burlin
- 363 *Walt Whitman and American Poetry*: Mrs. Dean
- 365a *American Autobiography*: Miss Niemtzw
- 365b *The American Dream*: Miss Niemtzw
- 366 *Herman Melville*: Miss Niemtzw
- 371 *The Development of Modern Poetry*: Mr. Jackson
- 375 *W. B. Yeats and Wallace Stevens*: Mrs. Berwind
- 376 *Beckett and Lawrence*: Mr. Jackson
- 383 *The Novel and Society*: Mrs. Bernstein
- 384 *Theories of Fiction*: Mrs. Bernstein
- 385 *Problems in Satire*: Mr. Briggs
- 386 *Milton and English Literary Tradition*: Mr. Briggs
- 388 *Modern Poetic Theory*: Mr. Jackson
- 389 *Studies in Twentieth-Century Criticism*: Mr. Jackson

French

Professors: Michel Guggenheim, Ph.D.
 Pauline Jones, Ph.D.†
 Catherine Lafarge, Ph.D., *Chairman*
 Mario Maurin, Ph.D.

Assistant Professors: Ullrich Langer, Ph.D.
 Margaret Simpson Maurin, Ph.D.
 Grace Armstrong Savage, Ph.D.

Prerequisites. An undergraduate major in French, based on study in school and at least three years of college French, including some advanced work in literature, with evidence of ability to present reports and carry on discussion in French. Training in Latin corresponding to at least two years' study in school is advisable.

Applicants should submit scores in the Aptitude Test and Advanced Test of the Graduate Record Examinations taken within two years of the date on which they wish to begin graduate studies at Bryn Mawr. Candidates are required to support their application by at least one essay written in French for an advanced undergrad-

† On leave semester II

uate course or graduate seminar previously taken, as well as by an essay written in English. They are strongly urged to arrange for a personal interview with a member of the Department.

Major and Allied Subjects. Students specialize in French literature from the Middle Ages to the present. Successful completion of a course in Old French philology and Medieval French literature is required of Ph.D. candidates. In special cases and with the consent of the Department, one of the following may be accepted as an allied subject: any literature, ancient or modern; comparative philology; European history; Philosophy; History of Art.

Language Requirements. For the M.A. degree, one Romance language other than French, or German, or evidence of extensive training in Medieval or advanced Latin. For the Ph.D. degree, either a reading knowledge of two modern languages (including one Romance language other than French) or superior competence in one. Students may satisfy the latter requirement by completing satisfactorily at least one unit of graduate work at Bryn Mawr in a Romance literature other than French, or in German literature. Language requirements must be fulfilled before the doctoral candidate takes the Preliminary Examinations.

Language skills will be tested by examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

Program and Examination for the M.A. Candidates will offer two units of graduate work in French and a third unit in either French or an allied field. An M.A. paper on a topic related to the work in one of the seminars is required. The Final Examination consists of a three-hour written examination and a one-hour oral examination, both in French.

Admission to Candidacy for the Ph.D. After completing three full units of graduate work at Bryn Mawr, students are required to pass a qualifying examination before admission to doctoral candidacy. The paper and Final Examination required for the completion of the Bryn Mawr M.A. program may be substituted for the qualifying examination.

Program and Examinations for the Ph.D. Candidates will offer six units of graduate work, one of which may be in an allied field. Suitable related fields should be discussed with the department concerned and with the Department of French.

Students are encouraged to study and do research abroad whenever appropriate and feasible. Opportunities for summer study are

provided by the graduate courses given at the Bryn Mawr *Institut d'Etudes Françaises d'Avignon*.

The Preliminary Examinations consist of four papers written in French and an oral examination. The Final Examination is oral and is devoted to the dissertation and the field in which it has been written.

General Degree Requirements for the M.A. and the Ph.D. See pages 14-16.

SEMINARS AND GRADUATE COURSES

An introductory course in Old French philology and Medieval French literature is offered every two years. Students wishing further work in this field may register for a unit of supervised work at Bryn Mawr or attend graduate courses at the University of Pennsylvania. Graduate seminars in selected fields of French literature are given each year, so arranged that the same one will not be given in successive years. The seminars, conducted in French, are selected from the following:

Mr. Guggenheim

Rousseau et le préromantisme

Voltaire

Techniques narratives [XIX^e et XX^e siècles]

Précieux, mondains et moralistes du XVII^e siècle—semester II

Miss Jones

Vigny et Camus

Verlaine, Rimbaud

Mallarmé

Baudelaire—semester I

Miss Lafarge

Stendhal et Flaubert

Le Thème de la prison au XIX^e siècle

Marivaux, Giraudoux

Diderot

Le Roman du XVIII^e siècle—semester I

Mr. Langer

Le Baroque en France

Épopées françaises et italiennes du XVI^e siècle

Poésie lyrique de la Pléiade

Mr. Maurin

Essayistes du XX^e siècle
L'Autobiographie de Chateaubriand à Sartre
Réalisme et naturalisme
Valéry, Claudel, Proust, Gide
Romancières du XX^e siècle
Mauriac et Sartre
Le Théâtre moderne—semester II

Mrs. Maurin

La Littérature fantastique en France
Le Surréalisme

Mrs. Savage

L'Art du conte et de la nouvelle des Cent Nouvelles Nouvelles
à Flaubert
Philologie et littérature médiévales
Le Théâtre médiéval

SELECTED UNDERGRADUATE COURSES

- 301b *Poésie maniériste et baroque*: Mr. Langer
302a *Voix médiévales et échos modernes*: Mrs. Savage
303b *La Vision de la femme dans la littérature française*:
Miss Lafarge
304b *Essayistes du XX^e siècle*
306a *Autobiographies de Chateaubriand à Sartre*: Mr. Maurin
307a *Ecrivains engagés de Montaigne à Sartre*
308a *Verlaine, Rimbaud*
309a *Gide et Sartre*
310a *Techniques narratives*

Courses offered at the *Institut d'Etudes Françaises d'Avignon*:

Molière or Racine
Les Fleurs du mal or Rimbaud
Le Surréalisme
Travaux de traduction et de stylistique

Preparatory course for degree candidates in other departments:

Reading French. This course, which does not carry academic credit, is designed to assist students in meeting the language requirements for advanced degrees in fields other than French. An extra charge will be made. Specific information may be obtained from the Graduate School of Arts and Sciences during registration.

Geology

Professors: Maria Luisa B. Crawford, Ph.D.†
Lucian B. Platt, Ph.D.

Associate Professors: William A. Crawford, Ph.D.*
W. Bruce Saunders, Ph.D., *Chairman*

Lecturers: Steven R. Carson, M.A.
Earl A. Shapiro, Ph.D.

Prerequisites. A bachelor's degree in a natural science or Mathematics. Students who have not majored in Geology will be expected to make up deficiencies in their preparation during their first years of graduate study. Applicants may submit scores in the Aptitude Test of the Graduate Record Examinations.

Major and Allied Subjects. Students may specialize in geochemistry, mineralogy-petrology, paleontology-stratigraphy, or regional and structural geology. The allied subject for the Ph.D. may be either another field of Geology or any one of the other natural sciences or Mathematics; other subjects may be accepted in special cases.

Language Requirements. For the M.A. degree, one of the following: Russian, German, or French. Candidates for the Ph.D. degree may offer two foreign languages from the following: Russian, German, or French; or one language from this list and proficiency in digital computation or statistics. This proficiency will be tested by the Department or may be demonstrated by the satisfactory completion of an appropriate course.

Language skills will be tested by examinations administered by Bryn Mawr College.

Program and Examination for the M.A. At least three units of work are required, one of which will consist of a field or laboratory research project under the direction of a member of the faculty. The results of the research project must be reported in a Master's thesis. The student must also pass a Final Examination consisting of a four-hour written and a one-hour oral test.

Program and Examinations for the Ph.D. Candidates will spend a major portion of their time on a research problem; ordinarily, this

† On leave 1980-81

* On leave semester I

will involve field mapping and collecting, together with laboratory study. The number of units of course work to be taken will depend on the student's preparation. A set of Preliminary Examinations which test general knowledge in Geology, knowledge in the candidate's special field, and either an allied subject or an additional field in Geology must be passed before the student becomes deeply involved in the research project. A Final Examination follows the completion of the Ph.D. dissertation. This examination is devoted to the dissertation and the field in which it has been written.

Every graduate student in the Department is expected to assist in the work of the Department.

General Degree Requirements for the M.A. and the Ph.D. See pages 14-16.

SEMINARS AND GRADUATE COURSES

Two or three courses or seminars are offered each semester. These are usually chosen so that each is offered once every other year. The specific content of the seminars is determined by the current interests of faculty and students. Students wishing to do so may also attend graduate courses at the University of Pennsylvania under the Reciprocal Plan (see page 12).

Mr. Crawford

Geochemistry and Analytical Techniques

Selected topics in the geochemistry of the earth combined with instruction in wet chemical and instrumental means of silicate analysis.

Igneous Petrology

Selected subjects in the structure, physical chemistry, and origin of igneous rocks. Prerequisite: Geology 303a, *Thermodynamics for Geologists*, or its equivalent.

Mrs. Crawford

Metamorphism

The physical and chemical processes of metamorphism, accompanied by regional studies. Prerequisite: Geology 303a, *Thermodynamics for Geologists*, or its equivalent.

Advanced Mineralogy

The study of selected rock-forming mineral groups accompanied by instruction in optical, chemical, and x-ray techniques.

Mr. Platt

Structural Geology

Modern concepts in structural geology and theories of deformation.

Tectonics

Stratigraphic and structural relations of mountain ranges leading to analysis of their origin.

Mr. Saunders

Paleontology

Study of selected animal groups in geologic time.

Sedimentary Petrology

The constitution and the origin of sedimentary rocks; their source, transportation, and deposition.

SELECTED UNDERGRADUATE COURSES

302b *Advanced Paleontology*: Mr. Saunders

303a *Thermodynamics for Geologists*: Mr. Crawford

304 *Petrology*: Mr. Crawford, Mrs. Crawford, Mr. Saunders

305b *X-Ray Crystallography*: Mrs. Crawford

German

Professor: Hans Bänziger, Ph.D.*
Nancy C. Dorian, Ph.D.

Associate Professors: Gloria Flaherty, Ph.D.
C. Stephen Jaeger, Ph.D., *Chairman*

Assistant Professor: Susan Joan Erickson, Ph.D.†

Prerequisites. An undergraduate major or minor in German or an equivalent preparation. All applicants are requested to submit scores in the Aptitude Test and Advanced German Test of the Graduate Record Examinations. They are also encouraged to write to the Chairman and seek a personal interview with the members of the Department whenever possible.

Major and Allied Subjects. Students may specialize in either German literature, German philology, or German linguistics. One of these fields or an area in humanities, especially the literatures, may serve as the allied subject. Graduate students can acquaint themselves with the theory and practice of teaching German by close cooperation with a member of the faculty.

* On leave semester I

† On leave 1980-81

Language Requirements. Normally French for the M.A.; French and another language, preferably Latin, for the Ph.D. With the approval of the Department, the satisfactory completion of a graduate seminar at Bryn Mawr in a foreign literature other than German may be offered for one language requirement. In special cases, with the approval of the appropriate language department and of the Department of German, equivalent work at another university may be accepted.

Language skills will be tested by examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

All graduate students are required to complete the Bryn Mawr M.A. Should a student have an M.A. in German from another institution, she or he will be expected to take a four-hour qualifying examination in German literature or Germanic philology or both after one full year of study and before proceeding to complete the remaining units in preparation for the Ph.D. Preliminary Examinations.

Program and Examination for the M.A. The program consists of three units in German literature and/or philology, or in German literature and philology and an allied field. In addition to providing familiarity with the field in general, the M.A. program is designed to introduce the student to various historical and critical approaches to the study of literature and language. Each student must demonstrate competence in spoken and written German. After completion of course work, each student must submit a Master's paper to the department clearly demonstrating independent research. The final examination, covering the student's general knowledge of the history of German literature, consists of a three-hour written examination and an oral examination of one hour.

Program and Examinations for the Ph.D. Every candidate must fulfill certain requirements in German literature and Germanic philology. Those majoring in Germanic philology take a minimum of one unit in German literature and will select the following courses: history of the German language, Gothic, Old High German, Middle High German, structural linguistics, and either Old English or Old Norse. Those majoring in German literature will take a minimum of one unit in Germanic philology and will normally take one unit each in the medieval, classical, and modern periods, as well as at least one genre course. The German Department encourages its students to participate in seminars given by other departments. It also encourages its students to study abroad and draws attention to the Anna Ottendorfer Memorial Research

Fellowship for study at a German university. Graduate students in German at Bryn Mawr may register for one course each semester at the University of Pennsylvania, or for one course in the area of Medieval Studies at Princeton. The Preliminary Examinations consist of four written tests, one of which must be taken in an allied field, and an oral examination. The Final Examination is devoted to the dissertation and the field in which it has been written.

General Degree Requirements for the M.A. and the Ph.D. See pages 14-16.

SEMINARS

Mr. Bänziger

Brecht and Dürrenmatt

Franz Kafka

Gottfried Keller and German Realism (1981-82)

Hofmannsthal and Rilke

Thomas Mann and Max Frisch

Miss Dorian

Comparative Germanic Grammar (on demand)

Old High German (on demand)

Miss Erickson

German Realism

The Modern German Novel (1981-82)

Miss Flaherty

Bibliography and Methods in Criticism (1980-81)

German Baroque Literature

Goethe and Schiller

Romanticism

Mr. Jaeger

Wolfram's Parzival

German Renaissance Literature (1981-82)

Middle High German Literature (1980-81)

SELECTED UNDERGRADUATE COURSES

300b *A Survey of German Literature*: Mr. Bänziger (1981-82)

301a *History of the German Language*: Miss Dorian (1981-82)

302a *Vernacular Literature in Medieval German*: Mr. Jaeger (1980-81)

303a *Modern German Prose*: Mr. Bänziger

304b *The German "Novelle"*: Miss Erickson

305b *The Modern German Drama*: Mr. Bänziger (1980-81)

307b *The Literature of the Renaissance and the Reformation:*
Mr. Jaeger

308a *Introduction to Middle High German:* Mr. Jaeger

309a *History of German Theater:* Miss Flaherty (1980-81)

310b *Lessing and the Enlightenment:* Miss Flaherty (1981-82)

315a *Language Learning and Teaching:* Miss Dorian (1980-81)
(INT.)

Greek

Professor: Mabel L. Lang, Ph.D., *Chairman*

Associate Professors: Gregory W. Dickerson, Ph.D.
Richard Hamilton, Ph.D.

Prerequisites. An undergraduate major or minor in Greek, based on at least four years of college Greek, or the equivalent, with representative reading from Greek literature and history which, in the opinion of the Department, provides an adequate basis for graduate work. It is expected that all graduate students in Greek will have some knowledge of Latin. Candidates for the Ph.D. degree must first complete an M.A. degree.

Allied Subjects. Any literature, ancient or modern, ancient history, ancient philosophy, Classical Archaeology, linguistics.

Language Requirements. Latin, French, and German for both the M.A. and the Ph.D. Language skills will be tested by examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

Program and Examination for the M.A. The program consists of two units of graduate work in Greek and a third unit in an allied field. Before admission to the Final Examination candidates must pass an examination in Greek sight translation and complete the M.A. paper. The Final Examination consists of a three-hour written examination on two of the fields covered by the student's seminars and an oral examination of one hour on the field of the paper.

Program and Examinations for the Ph.D. Before admission to the Preliminary Examinations candidates must pass a rigorous examination in Greek sight translation. The Preliminary Examinations consist of four written papers, one of which shall be an allied subject, and an oral examination. The fields from which the three

major papers may be selected include: epic poetry (with emphasis on Homer), lyric poetry (with emphasis on Pindar), tragedy, comedy, the orators, the historians, the Pre-Socratics, Plato, Hellenistic poetry, and various periods of Greek history, The Final Examination is devoted to the dissertation and the field in which it has been written.

General Degree Requirements for the M.A. and the Ph.D. See pages 14-16.

SEMINARS AND GRADUATE COURSES

Mr. Dickerson

Sophocles—semester I 1980-81

Aeschylus—semester I 1981-82

Mr. Hamilton

Pindar—semester II 1980-81

Euripides—semester II 1981-82

Miss Lang

Homer—semesters I and II 1980-81

Thucydides—semesters I and II 1981-82

SELECTED UNDERGRADUATE COURSES

The following undergraduate courses are open to graduate students in other fields.

101 *Herodotus and Tragedy*: Mr. Dickerson, Mr. Hamilton

102b *Homer's Odyssey*: Mr. Dickerson

201 *Plato and Thucydides; Tragedy*:

Mr. Hamilton, Mr. Dickerson

301 *Aeschylus and Aristophanes; Hesiod and Pindar*:

Mr. Dickerson, Mr. Hamilton

History

Professors: Charles M. Brand, Ph.D., *Chairman*†
Arthur P. Dudden, Ph.D.
Mary Maples Dunn, Ph.D., *Dean of*
the Undergraduate College
Elizabeth Read Foster, Ph.D.
Barbara M. Lane, Ph.D.†
J. H. M. Salmon, Lit.D.
Alain Silvera, Ph.D.
James Tanis, Th.D., *Director of Libraries*

Associate Professor: Phyllis S. Lachs, Ph.D.

Assistant Professors: Wendell Holbrook, Ph.D.
Allan Kulikoff, Ph.D.
Stephen Poppel, Ph.D.‡

Dean of the Graduate School of Arts and Sciences:
Barbara McLaughlin Kreutz, Ph.D.

Fields of Study. Master's and doctoral programs should be developed from seminars and courses available. Research for theses and dissertations should grow out of seminars and units offered by the History Department and those allied with it.

Prerequisites. A thorough undergraduate preparation in History, the humanities, and the social sciences. Students who wish to work in ancient or medieval fields must be able to read the essential ancient languages. Those planning work in modern European history or American history must have a reading knowledge of one modern language, preferably French or German, upon entrance. Those planning doctoral programs should have two languages upon entrance or acquire the second language at once. Applicants must submit scores in the Aptitude Test of the Graduate Record Examinations, and a sample of recent historical writing.

Language Requirements. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

At least one modern foreign language, to be approved by the Department, is required of M.A. degree candidates. The College language examination must be attempted before the end of the first

† On leave semester II

‡ On leave 1980-81

semester's work; the examination must be passed before the end of the following summer or before candidacy for the degree is requested, whichever is earlier.

At least two modern foreign languages, the choice of which must be approved by the Department during the student's first academic year, are required of the Ph.D. candidates. Students entering with an A.B. must attempt a College language examination before the end of the first semester's work and must pass the examination in one language before they may enter upon a third semester of work. They must attempt an examination in the second language no later than their third semester of work and must pass an examination on this second language before they may enter upon a fifth semester of work. Students entering with an M.A. must attempt examinations in both languages before the end of their first semester and must pass examinations in both before they may enter upon a third semester of work. The time limit for part-time students is determined by the academic year, not by the number of units completed. Candidates for the Ph.D. in ancient or medieval history must also demonstrate ability to read one classical language. Directors of research may also require demonstration of ability in special techniques.

In practice, since the College language examinations are scheduled toward the beginning of the second semester, proof of language facility must often be established early in the second semester of work to enable the student to enter upon a third semester of work. In addition, since financial aid decisions are made early in semester II, often before semester II language examinations are completed, students applying for financial aid for the succeeding academic year should demonstrate language competence before the end of semester I.

Program and Examination for the M.A. The program consists of three units of work in History or in History and an allied field, together with a paper and a final examination. The Final Examination is written and is usually four hours in length.

Program and Examinations for the Ph.D. All students are expected at some time to take a seminar or course in which aspects of historiography and historical method are studied. The Preliminary Examinations test the student's competence in four fields of History or in three fields of History and one field in an allied subject. For example, allied work in medieval literature, art, or philosophy is usually recommended to students of medieval history, and one of these may be offered in the Preliminary Examinations. Students whose dissertations are in American history will be required to take at least two fields in modern European history. Students specializing in English history must offer at least two fields of medieval

or modern European history for examination. The field of the projected dissertation will be included in the Preliminary Examinations. The Final Oral Examination is devoted to the dissertation and the field in which it has been written; plans for publication will also be reviewed. The department reviews each student's progress and plans for work at all stages.

General Degree Requirements for the M.A. and the Ph.D. See pages 14-16.

SEMINARS AND GRADUATE COURSES

The seminars are arranged to allow the fullest possible choice for students over a two- or three-year period of study. Normally the same seminar will not meet two years in succession. Topics listed below indicate the area in which seminars will be offered according to the needs of students and the current research interests of the faculty.

Ancient History

Students should consult pages where the offerings of the Departments of Greek and Latin are listed.

Medieval and Renaissance History

Mr. Brand

Topics in Medieval History

The Fifth and Sixth Centuries

The Twelfth Century

Venice from the Tenth through the Thirteenth Centuries

Early Modern European History

Mr. Salmon

French Political Ideas from the Wars of Religion to the Enlightenment

Mr. Tanis

The Reformed Reformation in Northern Europe

Selected Topics in Sixteenth-Century Religious Turmoil

Modern European History

Mrs. Lane

Modern Germany: National Socialism, Bauhaus

Topics in the History of Twentieth-Century Europe

Mr. Poppel

Topics in the History of nineteenth- and Twentieth-Century Europe

Mr. Silvera

The French Third Republic
Europe and the Near East
Topics in Modern European History

American and British History

Mr. Dudden

Topics in Recent American History

Mrs. Dunn

Seventeenth-Century America
Eighteenth-Century America

Mrs. Foster

Parliament in the Early Stuart Period
Social and Economic History of the Early Stuart Period
Topics in Early Modern English History

Mr. Kulikoff

Topics in American Colonial History

Mr. Tanis

Puritanism and the Great Awakening

Methodology and Historiography

Mr. Krausz

Philosophy of History—offered in the Department of
 Philosophy

Mr. Salmon

Readings in Eighteenth-Century Historiography

Mr. Tanis

Historiography of the Reformation

African and Afro-American History

Topic to be announced

SELECTED UNDERGRADUATE COURSES

300-level courses may, with additional work, be offered for graduate credit.

303 *Topics in the Recent History of the United States:*

Mr. Dudden

304 *Topics in Revolutionary Europe, 1789-1848:* Mr. Silvera

305a *The Italian City-State in the Renaissance:* Mrs. Lane

- 307b *Medieval Cities: Islamic, Byzantine, and Western*: Mr. Brand
- 308a *The Jews in the Middle Ages*: Mr. Brand
- 315a *Victorian and Edwardian Britain*: Mrs. Lachs
- 317a *Mexico: Independence to the Present*: Mrs. Dunn
- 320a *The Rise of the Dutch Republic*: Mr. Tanis
- 320b *The Golden Age of the Netherlands*: Mr. Tanis
- 322 *Religious Forces in Colonial America*: Mr. Tanis
- 328a *Colonial Towns in North and South America*: Mrs. Dunn
- 330 *France since 1870*: Mr. Silvera
- 332 *The Civil War and Reconstruction*: Mr. Holbrook
- 335a *A History of Blacks in the American City*: Mr. Holbrook
- 335b *West African Leadership*: Mr. Holbrook
- 360 *England under the Tudors and Stuarts*: Mrs. Foster
- 362 *France, 1559-1661*: Mr. Salmon
- 370b *The Great Powers and the Middle East*: Mr. Silvera
- 375b *Topics in the Renaissance*: Mr. Salmon
- 393b *Self-Portrait of England in the Sixteenth and Seventeenth Centuries*: Mrs. Foster

History of Art

Professor: James Snyder, M.F.A., Ph.D.

Associate Professor: Dale Kinney, Ph.D., *Chairman*

Assistant Professor: Steven Z. Levine, Ph.D.

Lecturer: Betsy Rosasco, Ph.D.

Professor of Classical and Near Eastern Archaeology and of History of Art: Phyllis Pray Bober, Ph.D.

Field of Study. The history of Western art from early Christian to modern times.

Prerequisites. The normal prerequisite for admission is undergraduate training in art history, but students with special abilities or sound training in cognate disciplines are occasionally admitted. All applicants must submit scores in the Aptitude Test of the Graduate Record Examinations.

Allied Subjects. History, Archaeology, classics, modern languages; others, exceptionally, by arrangement.

Language Requirements. Students are expected to read or to be learning the languages necessary for their special fields of study and not to delay their research by lack of linguistic competence. Advanced study of Western art history normally involves a working knowledge of Latin, French, German, and Italian. Both M.A. and Ph.D. candidates are required to prove by examination their knowledge of two languages other than their own, to be approved by the Department.

Language skills will be tested by the examinations administered by Bryn Mawr College. Entering students may offer scores of the Graduate School Foreign Language Test (GSFLT) of the Educational Testing Service taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

Program and Examination for the M.A. (a) Three units of graduate work, one of which may be in an allied field, (b) an extended paper on an approved topic, (c) written [or written and oral] examination to test the candidate's ability to place this topic in its art-historical context.

Program and Examinations for the Ph.D. Prime emphasis is placed on a program of study and research leading to the dissertation, and students normally begin to work under a personal supervisor soon after entry. The Preliminary Examinations consist of four written papers and an oral examination on four areas of art history (or on three of these and one allied subject). After two or three years at Bryn Mawr, students normally go abroad for a period of research on their dissertations.

General Degree Requirements for the M.A. and the Ph.D. See pages 14-16.

Kress Program. The Department participates in the Samuel H. Kress Foundation Fellowship Program.

SEMINARS AND GRADUATE COURSES

Four or more one-term seminars are given annually, on topics that change from year to year, in addition to units of supervised individual study or research. Recently offered seminars include:

Liturgy and Architecture

Early Christian and Byzantine Syria

The Art and Influence of Montecassino

Illustrated Psalters

Early Dutch Painting

Dutch Paintings from Geertgen to Heemskerck

Carel van Mander's Het Schilder-boeck

Medieval and Renaissance Drawing

The Patronage of Julius II
Leon Battista Alberti
Michelangelo
Problems in the Reform of Italian Art, 1550-1600
Selected Topics in Baroque Painting
Venetian Eighteenth-Century Painting
French Eighteenth-Century Painting
Monet and Impressionism
Cezanne
Contemporary Spanish Painting

TOPICS FOR 1980-81:

Mrs. Bober
Antiquity and the Renaissance
Mrs. Kinney
Problems in Medieval Italian Art
Mr. Levine
Topics in Modern Art
Miss Rosasco
Topics in Baroque Art
Mr. Snyder
Late Gothic Painting

SELECTED UNDERGRADUATE COURSES

310b *Topics in Early Medieval Art*: Mrs. Kinney
320a *Problems in Netherlandish Art*: Mr. Snyder
340a *Problems in Renaissance and Baroque Iconography*:
Miss Rosasco
350a *Topics in the History of Modern Architecture*: Mrs. Lane
INT (see INT. 350 in undergraduate Interdepartmental Courses)
360b *Topics in Modern Art*: Mr. Levine

History of Religion

Professor: Samuel Tobias Lachs, Ph.D., D.D.

Professor of History: James Tanis, Th.D., *Director of Libraries*
and *Professor of History of Religion*

Visiting Lecturer: Patrick Henry, Ph.D.

A degree program at the graduate level is not offered in History of Religion. For work in this area, students should consult the offerings of the Department of History. The courses listed below are open to graduate students and, with additional work, may be taken for graduate credit with permission of the major department.

210b *Jewish Ethics and Theology*: Mr. Lachs

300b *Studies in Early Rabbinic and Medieval Judaism*: Mr. Lachs

212a *Christianity and Classical Culture*: Mr. Henry

Italian

Associate Professors: Nancy Dersofi, Ph.D.

Nicholas Patruno, Ph.D., *Chairman*

No graduate program is offered in Italian. The courses listed below are open to graduate students and may be taken for graduate credit with the permission of the major department.

301a *Dante*

303a *Petrarch, Boccaccio, and the Early Humanists*

303b *Literature of the Italian Renaissance*

305a *Arcadia and Enlightenment*

305b *History of the Italian Theater*

Latin

Professors: Russell T. Scott, Ph.D., *Chairman*

Myra L. Uhlfelder, Ph.D.

Associate Professor: Julia H. Gaisser, Ph.D.

Prerequisites. An undergraduate major or minor consisting of at least three years of Latin in college. All graduate students in Latin are expected to have begun the study of Greek. Scores in the Aptitude Test of the Graduate Record Examinations should be submitted.

Allied Subjects. The Department recommends as allied subjects: Greek, Classical Archaeology, ancient history, linguistics, or, for

students whose special interest is in the medieval period, medieval history or a vernacular literature.

Language Requirements. French and German are required for both the M.A. and Ph.D. Language skills will be tested by examinations administered by Bryn Mawr College. Candidates for advanced degrees must also demonstrate satisfactory competence in Latin composition by examination or course work.

Program and Examination for the M.A. Candidates will normally offer two units of work in Latin and one unit in an allied field. Students will normally complete the work for the degree in one year, but, in cases in which it seems advisable to supplement the student's undergraduate preparation, a second year may be necessary. Candidates must pass a test in Latin sight translation before being admitted to the Final Examination, which consists of a three-hour written and a one-hour oral examination.

Program and Examinations for the Ph.D. Candidates will normally complete a two-year program of four units of work in Latin and two in an allied field. Three of these units may be offered for the M.A. degree, which usually forms part of the doctoral program. Candidates should then undertake a program of independent reading planned to enable them to pass the Preliminary Examinations as soon as possible, after which they will concentrate on the dissertation. In some cases it may be advisable to carry one or two more units of work in the third year. The Preliminary Examinations consist of two four-hour written papers on Latin literature; one four-hour written paper on a special field such as a particular period of Roman history, the works of a special author, Medieval Latin literature, epigraphy, palaeography, or the history of classical scholarship; one four-hour written paper in the field of the allied subject and a general oral examination. Students whose major interest is in the medieval period will take the two examinations in Latin literature, one in Medieval Latin literature, and a fourth in a field related to the Middle Ages or to the transmission of the classics. Before admission to the Preliminary Examinations, all students must pass tests in sight translation of Latin and Greek. The Final Examination is devoted to the dissertation and the field in which it has been written.

General Degree Requirements for the M.A. and the Ph.D. See pages 14-16.

SEMINARS AND GRADUATE COURSES

Over a period of a few years, seminars will afford the student opportunity to work in specific areas of classical (Republican and

Imperial) and medieval literature and civilization. Authors, genres, periods, or special topics dealt with in the seminars will vary according to the needs and desires of graduate students. A balance of prose and poetry, of literature and history, and of earlier and later periods is kept in mind in the establishment of the program.

The following seminars are offered in 1980-82:

Mrs. Gaisser

The Alexandrian Tradition in Latin Poetry—semester I

Mr. Scott

Livy: Early Rome—semester II

Miss Uhlfelder

Imperial Literature—semesters I and II

1980-81

Mrs. Gaisser

Elegy and Horace—semester II

Mr. Scott

Tacitus—semesters I and II

Miss Uhlfelder

Latin Style—semester I

1981-82

Mrs. Gaisser

Lucretius and Vergil—semesters I and II

Mr. Scott

Roman Satire—semester II

Miss Uhlfelder

Apuleius—semester I

SELECTED UNDERGRADUATE COURSES

202a,b *Medieval Latin Literature*: Miss Uhlfelder

301a *Livy and Tacitus*: Mr. Scott

301b *Vergil's Aeneid*: Mrs. Gaisser

302a *Lucretius*: Miss Uhlfelder

302b *Cicero and Caesar*: Mr. Scott

Mathematics

Professors: Frederic Cunningham, Jr., Ph.D., *Chairman*
Mario Martelli, Ph.D.

Assistant Professor: Rhonda J. Hughes, Ph.D.

Prerequisites. A good undergraduate preparation in Mathematics or in Mathematics and Physics.

Major and Allied Subjects. Students may specialize in any of the broad divisions of Mathematics: algebra, analysis, geometry, or applied mathematics but are expected also to acquire a well-rounded knowledge of the subject as a whole. Certain courses in Physics, Chemistry, or Philosophy (logic) are accepted as allied work.

Language Requirements. Candidates for the M.A. must have a reading knowledge of French, German, or Russian. Candidates for the Ph.D. must pass examinations in two of the three: French, German, Russian.

Language skills will be tested by examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twenty-four months of the date on which they begin graduate work at Bryn Mawr.

Program and Examination for the M.A. The program consists of three units of work in Mathematics, or in Mathematics and an allied field, and an M.A. paper. Advanced undergraduate courses which supplement the student's preparation may under certain conditions be taken for graduate credit. The Final Examination is usually oral and one hour in length.

Program and Examinations for the Ph.D. Candidates will take such courses and seminars as are needed to provide a sufficiently broad foundation. As they progress they will devote an increasing portion of their time to individual study and research under the direction of a member of the Department. The Preliminary Examinations are taken after the student is well advanced and usually consist of three or four written examinations intended to test the candidate's breadth of knowledge and understanding of the structure of Mathematics as a whole. An oral examination is usually included. The Final Examination is oral and is devoted to the candidate's special field and the subject of the dissertation.

General Degree Requirements for the M.A. and Ph.D. See pages 14-16.

SEMINARS AND GRADUATE COURSES

The work of the graduate program consists primarily of reading and research under the direction of members of the department. Seminars are offered in selected topics as justified to meet the needs and interests of sufficient numbers of students. Students are also encouraged to take advantage of the reciprocity agreement to take a course at the University of Pennsylvania.

Mr. Cunningham

Real and Complex Analysis

Functional Analysis

General Topology

Linear Spaces

Harmonic Analysis

Mr. Martelli

Real and Complex Analysis

Differential Equations

Dynamical Systems

Applied Mathematics

Non-linear Functional Analysis

Mrs. Hughes

Real and Complex Analysis

Measure Theory

Banach Algebras

Linear Operators

Mathematics of Quantum Physics

SELECTED UNDERGRADUATE COURSES

301 *Advanced Calculus*

303a *Introduction to Abstract Algebra*

303b *Topics in Algebra*

308 *Introduction to Applied Mathematics*

309b *Dynamical Systems*

310 *Theory of Functions of a Complex Variable*

311 *Differential Equations*

312 *Topology*

320 *Real Analysis*

Music

Professor: Isabelle Cazeaux, Ph.D., Chairman

Applications are no longer being accepted for graduate study leading to a degree in Music. Graduate seminars and approved courses may be taken for graduate credit with the permission of the major department.

SEMINAR AND GRADUATE COURSE

Miss Cazeaux

Subject to be announced

SELECTED UNDERGRADUATE COURSES

Undergraduate courses taken for graduate credit require additional work.

302 *Medieval, Renaissance and Baroque Music*: Miss Cazeaux

307a *Music Criticism*: Miss Cazeaux

310a *Bibliography and Research*: Miss Cazeaux

306b *Opera and Music Drama*: Miss Cazeaux

Philosophy

Professors: José María Ferrater Mora, Lic. Fil., Ph.D.

George L. Kline, Ph.D., Chairman

Jean A. Potter, Ph.D.†

Associate Professors: Michael Krausz, Ph.D.

George E. Weaver, Jr., Ph.D.

Assistant Professors: Robert J. Dostal, Ph.D.

Richard H. Gaskins, Ph.D., J.D.

Associate Professor of Political Science:

Stephen G. Salkever, Ph.D.

Visiting Lecturer: David Lachterman, Ph.D., Swarthmore College, semester II, 1980-81‡

† On leave semester II

‡ Under a faculty exchange program with Swarthmore and Haverford Colleges

Prerequisites. In general, an undergraduate major in Philosophy. Students whose undergraduate training does not include a major in Philosophy may be required to take such undergraduate courses as the Department considers necessary. All applicants are required to submit scores in the Aptitude Test of the Graduate Record Examinations.

Allied Subjects. Subjects in most fields of the humanities, mathematics, and natural and social sciences.

Language Requirements. One modern language for the M.A., French and German for the Ph.D. At the discretion of the Department, another language may be substituted for French or German when the student's research requires it.

Language proficiency will be tested by examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

Program and Examination for the M.A. Three units of work in Philosophy or in Philosophy and an allied field. The Final Examination is usually written and four hours in length.

Program and Examinations for the Ph.D. All students must demonstrate competence in logic before receiving the Ph.D. This requirement may be met in several ways: by successful completion, before admission to candidacy, of an intermediate course or graduate seminar in logic; or by special examination before admission to candidacy; or by passing a preliminary examination in the systematic field of logic. The Preliminary Examination will consist of four written examinations, two of which are to be in systematic fields and two in authors or periods.

General Degree Requirements for the M.A. and Ph.D. See pages 14-16.

Graduate Philosophy Colloquium. Graduate students are encouraged to participate in the monthly meetings of the Graduate Philosophy Colloquium. Papers are read by faculty and students of Bryn Mawr as well as visiting lecturers. In addition, both the Fullerton Club and the Philadelphia Logic Colloquium hold their monthly meetings at Bryn Mawr and the graduate students are invited to attend.

SEMINARS

Mr. Dostal

Phenomenology: Husserl, 1980-81

Kant: Critique of Pure Reason and Critique of Judgment

Heidegger

Hermeneutics

Mr. Ferrater Mora

Foundations of Contemporary Epistemology and Ontology,
1980-81

Mr. Kline

Ethics, 1980-81

Hegel: Phenomenology of Spirit and Philosophy of Right,
1981-82

Whitehead

Mr. Krausz

Aesthetics, 1980-81

Philosophy of History, 1981-82

Philosophy of Science

Metaphysics and Epistemology

Miss Potter

Continental Rationalism, 1981-82

Medieval Philosophy

Philosophy of Religion

History of Philosophic Concepts

Mr. Salkever

Aristotle, semester I 1980-81

Political Philosophy

Mr. Weaver

Logical Theory, 1980-81

Introduction to Mathematical Logics, 1981-82

Homogeneous Universal Models

Mr. Lachterman

Plato: Late Dialogues, semester II 1980-81

Mr. Lacey

Philosophy of Psychology, semester I 1981-82

Mr. Bernstein

Philosophy of Social Theory, semester II 1981-82

SELECTED UNDERGRADUATE COURSES

1980-81

312b *Philosophy of History*: Mr. Krausz

313b *Contemporary Philosophy*: Mr. Ferrater Mora

315a *Concepts of Time*: Mr. Kline

316a *History and Philosophy of Mathematics*: Mr. Weaver

317a *Philosophy of Creativity*: Mr. Krausz

330a *Kant: Critique of Pure Reason*: Mr. Dostal

331b *Hegel*: Mr. Dostal

AT UNIVERSITY OF PENNSYLVANIA

History 438 *Russian Thought and Culture: Varieties of Russian Marxism to 1917*: Mr. Kline, semester II

1981-82

- 310 *Philosophy of Science*: Mr. Krausz
- 311 *Philosophy of Religion*: Miss Potter
- 318 *Philosophy of Language*: Mr. Weaver
- 322 *The Nature of Legal Reasoning*: Mr. Gaskins
- 333 *Russian Philosophy*: Mr. Kline

Physics

Professors: Rosalie C. Hoyt, Ph.D.
John R. Pruett, Ph.D.

Associate Professor: Alfonso M. Albano, Ph.D., *Chairman*

Assistant Professors: Neal B. Abraham, Ph.D.
Peter Beckmann, Ph.D.†

Fields of Study and Research. The graduate program is designed to give students a broad background in physics and a high degree of expertise in a chosen field of research. Seminars and original research are tailored to meet individual needs and goals, which can include interdisciplinary studies, teaching, and applied research, as well as pure research in theoretical and experimental physics. In theoretical physics, the present research activities in the department involve non-equilibrium thermodynamics, nuclear and electron spin interactions, solid-solid phase transitions, photon statistics and gas laser theory, and the structure and function of biomembranes and other systems using computer modeling techniques. In experimental physics, present activities include nuclear spin relaxation studies in molecular solids using pulsed nuclear magnetic resonance, high-gain laser amplifiers and studies of amplified spontaneous emission in lasers, and nuclear spectroscopy using directional and polarization correlation techniques. Using the Plan for the Coordination of the Sciences there are special opportunities for research and training in such areas as chemical physics, biophysics, and geophysics. See page 89.

†On leave 1980-81

Prerequisites: An undergraduate major in Physics or in a field of study closely allied to Physics (e.g., Mathematics, Chemistry, Engineering). Students who have not majored in Physics will usually find it necessary to take some undergraduate courses before entering graduate courses and seminars. All applicants for admission to graduate work in Physics are requested to submit scores in the Aptitude Test and Advanced Test of the Graduate Record Examinations.

Language Requirements. For both the M.A. and the Ph.D. degrees, one language is required, normally French, German, or Russian. Language skills are tested by examinations administered by Bryn Mawr College.

Computer Skills Requirement. For both the M.A. and the Ph.D. degrees, proficiency is required in the use of a modern computer language approved by the Department. Computer skills are tested by examinations administered by Bryn Mawr College.

Qualifying Examination. An oral qualifying examination must be passed by all graduate students. The subject matter of the examination, which is normally taken in the first semester of graduate work, will include only material ordinarily covered in undergraduate physics courses.

Program and Examination for the M.A. The qualifying examination discussed above must be taken during the first year. The three units of work offered for the degree must include the quantum mechanics course and will ordinarily include one unit of experimental physics. The paper will usually consist of a report on a special field related to one of the seminars or units of graduate work offered for the M.A. The M.A. Examination is a one-hour oral examination.

Program and Examinations for the Ph.D. Each student is normally expected to have completed the graduate courses in Quantum Mechanics and Electromagnetic Theory, or their equivalents, must have a mathematical preparation acceptable as adequate for the Ph.D. degree, and must have passed the oral qualifying examination described above before being recommended for candidacy.

The Preliminary Examinations are intended to test the candidate's general background and to determine whether it is broad and deep enough to serve as a preparation for original research work in a specialized field. In general, two years of full- or part-time graduate work should prepare the student for these examinations, and candidates for the Ph.D. are urged to submit themselves for examination at this stage of their work. The examinations will consist of three four-hour written examinations, one problem set, and an oral

examination lasting approximately one hour. The three four-hour examinations will cover the following fields of Physics: classical mechanics, special relativity, electromagnetic theory, optics, quantum mechanics, atomic physics, molecular physics, solid state physics, nuclear physics, thermodynamics and statistical mechanics. The student devotes approximately twelve hours to direct work on the problem set over a three-day period. Any books, periodicals, notes, etc., may be used in connection with the problem set. The oral examination is devoted to general Physics.

Unless the candidate has demonstrated adequate acquaintance with experimental physics in other ways, either the research leading to the dissertation must be, at least in part, experimental or the candidate must take a seminar in experimental physics. The Final Examination will be devoted to the dissertation and the field in which it has been written.

General Degree Requirements for the M.A. and Ph.D. See pages 14-16.

Colloquium. All members of the Department, including graduate students, meet weekly for the discussion of current problems.

GRADUATE COURSES

Year long (1 unit) graduate courses in quantum mechanics and electromagnetic theory are offered every year. Although both are normally taken in the first year, one or, if necessary, both may be delayed a year if it is felt that the student requires prior work at the level of advanced undergraduate courses. Students who have taken equivalent graduate courses elsewhere may be exempted.

Quantum Mechanics

Mathematical formalism of matrix and wave mechanics; the Schroedinger, Heisenberg, and Interaction Approaches; time-independent and time-dependent perturbation theory; semi-classical theory of radiation; the density matrix; Dirac's relativistic wave equation.

Electromagnetic Theory

Electrostatics, magnetic fields of constant currents, Maxwell's equations and their applications, electromagnetic fields of time-varying currents and of moving charges and radiation of electromagnetic waves.

SEMINARS

The seminars reflect both the research activities of the faculty and the research interests of the students. As a result, contents are flexible and are chosen to satisfy the needs of individual students and to

incorporate recent developments in each field. Seminars may cover either one or two semesters (1/2 or 1 unit). Those listed below are intended only to be representative, offerings in any given year being determined by student needs. Under the Reciprocal Plan, students may also take graduate courses at the University of Pennsylvania. See page 12.

Mr. Abraham

Quantum Optics

Laser Physics

Mr. Albano

Statistical Mechanics

Non-equilibrium Thermodynamics

Advanced Quantum Mechanics

Mr. Beckmann

Solid State Physics

Magnetic Resonance

Miss Hoyt

Topics in Biophysics

Molecular and Chemical Physics

Use of Group Theory in Physics

Mr. Pruett

Nuclear Physics

Molecular Physics, with applications to biomembrane structure and function

Members of the Department

Experimental Physics

Mathematical Physics

SELECTED ADVANCED UNDERGRADUATE COURSES

308a *Advanced Classical Mechanics*

309b *Advanced Electromagnetic Theory*

310b *Mathematical Physics*

Political Science

The Caroline McCormick Slade Department of Political Science

Professors: Melville T. Kennedy, Jr. Ph.D.

Gertrude C. K. Leighton, A.B., J.D.

Marc Howard Ross, Ph.D., *Chairman*

Associate Professors: Charles E. Frye, Ph.D.

Stephen G. Salkever, Ph.D.

Prerequisites. A good undergraduate training in Political Science and related subjects. Scores of the Graduate Record Examination Aptitude Test and Advanced Test are required in applications for admission.

Major and Allied Subjects. The major fields offered in Political Science are political philosophy and theory, Western comparative politics, non-Western comparative politics, American political process, political behavior, American constitutional law, and international politics and law. Allied fields may be chosen in the other social sciences, in History and Philosophy, and, with the special permission of the Department, in certain subjects in literature. Candidates for the Ph.D. are expected to prepare themselves in four fields, one of which may be allied.

Language Requirements. One modern foreign language or statistics for the M.A. Two foreign languages (only one need be modern) or one modern language and statistics for the Ph.D. Language skills will be tested by examinations administered by Bryn Mawr College. The statistics requirement may be satisfied by passing an approved course in statistics, or through an examination.

Program and Examination for the M.A. The program consists of three units of work in Political Science, but a unit from an allied field may be substituted for one of these. The Final Examination will be written or oral or both.

Program and Examinations for the Ph.D. Candidates are expected to offer four fields, one of them being the field in which the dissertation is written. These fields are tested by written and oral Preliminary Examinations. An oral Final Examination will be devoted to the dissertation and the field in which it has been written.

General Degree Requirements for the M.A. and the Ph.D. See pages 14-16.

SEMESTER SEMINARS

The following one semester seminars are offered on demand.

Mr. Frye

European Comparative Politics

Intellectuals in Comparative Perspective

Mr. Kennedy

International Politics

Topics in Politics of China, Japan, India

Miss Leighton

Aspects of Political Behavior

International Law

Jurisprudence

Mr. Ross

American Politics: Political Behavior

Community Politics

Public Policy

Mr. Salkever

Aristotle

Political Philosophy

SELECTED UNDERGRADUATE COURSES

218b *Community Politics*: Mr. Ross

221b *International Law*: Miss Leighton

230b *Political Behavior*: Mr. Ross

301b *Law Society*: Miss Leighton

302b *Law, Policy, and Personality*: Miss Leighton

303a *Problems in International Politics*: Mr. Kennedy

305b *European Fascism*: Mr. Frye

311b *Theory and Practice in Political Philosophy*: Mr. Salkever

312b *Problems in Modernization*: Mr. Kennedy

313b *Problems in Constitutional Law*: Mr. Salkever

315b *Political Authority and Decision Making*: Mr. Ross

317a *Political Culture and Political Leadership*: Mr. Frye

318b *Urban Political Conflict*: Mr. Ross

327a *Political Philosophy in the 20th Century*: Mr. Salkever

328a *United States Policy in Asia*: Mr. Kennedy

Psychology

Professors: Richard C. Gonzalez, Ph.D., *Chairman*
Howard S. Hoffman, Ph.D.
Matthew Yarczower, Ph.D.

Associate Professors: Clark McCauley, Jr., Ph.D.
Earl Thomas, Ph.D.

Assistant Professor: Virginia Mann, Ph.D.

Prerequisites. Undergraduate training in Psychology is recommended, but outstanding applicants with training only in related fields may be accepted. Students who have not majored in Psychology as undergraduates may find it necessary to devote a substantial portion of the first year to undergraduate courses. All applicants must submit scores on the Aptitude Test and Advanced Test of the Graduate Record Examinations.

Major and Allied Subjects. The orientation in the various fields is experimental, and there are no facilities for clinical training. Work in Psychology may be coordinated with work in one of the following allied areas: Anthropology, Biology, Chemistry, Mathematics, Philosophy, and Physics.

Language Requirements. Candidates for the M.A. must pass an examination in one of the following languages: French, German, Russian, Spanish. Candidates for the Ph.D. must offer two foreign languages: French and German (or some other foreign language with permission of the Department) or one foreign language and statistics. The statistics requirement will be tested by the Department. Language skills will be tested by the examinations administered by Bryn Mawr College.

Program and Examination for the M.A. The program of work must include three units (six one-semester seminars or courses) which usually will be chosen from the group of seminars and courses listed below. Before final approval of the Master's paper, each candidate must pass a written examination in statistics. The Final Oral Examination, one hour in length, deals with the Master's paper and related topics.

Program and Examinations for the Ph.D. Ph.D. candidates are expected to devote a large portion of their time to supervised research. In the first year, the research is done under the close supervision of the candidate's faculty advisor; a written report of the year's research activities (the form and content of which are deter-

mined by the candidate and his advisor) is submitted to the Department, and an oral presentation based on the report is made to the faculty and graduate student members of the Department. In addition to research, candidates, in their first two years of residence, take the six one-semester graduate courses listed below (or, if they elect to do so, a written examination in the subject matter instead of any one or all of the courses). The Preliminary Examinations, which should be taken early in the third year, consist of three written area-examinations of four hours each and a paper which either (a) synthesizes a major area of research in psychology or (b) develops a theoretical analysis of a major problem or issue in psychology. The three area-examinations must be completed within four weeks; the entire set of examinations (including the paper) must be completed within six months. The three four-hour examinations are in the following areas: learning and motivation, physiological psychology, social psychology, developmental psychology, or, with the approval of the Department, in two of these areas and in one of the allied subjects listed above. (The area of comparative psychology as such is not represented in a separate examination; comparative issues are treated in each of the other area-examinations.) The topic of the paper is developed initially by the student and his advisor and submitted to the Department for approval.

General Degree Requirements for the M.A. and the Ph.D. See pages 14-16.

GRADUATE COURSES

Mr. Gonzales

Learning Theory

Mr. Hoffman

Statistics

Mr. McCauley

Experimental-Social Psychology

Mr. Thomas

Physiological Psychology

Miss Mann

Developmental Psychology

Mr. Yarczower

Comparative Psychology

SEMINARS

Seminars are offered on specialized topics in the areas of experimental, comparative, developmental, physiological, and social

psychology. Among those offered most recently are the following: *Communication Theory, Experimental Design, Current Literature in Behavior Theory, Physiological Techniques and Instrumentation, Psychopharmacology, Stimulus Control of Behavior, Aversive Control, Neurophysiology of Reward and Punishment, Comparative Neuroanatomy, Sensory Processes, Psycholinguistics.*

SELECTED UNDERGRADUATE COURSES

- 201a *Learning Theory and Behavior*: Mr. Gonzalez
- 202b *Comparative Psychology*: Mr. Yarczower
- 204a *Sensory Processes*: Mr. Hoffman
- 207b *Psychology of Reading*: Miss Mann
- 302b *Physiological Psychology*: Mr. Thomas
- 303b *Psychopharmacology*: Mr. Thomas

Russian

Associate Professors: Dan E. Davidson, Ph.D., *Chairman*
Ruth L. Pearce, Ph.D.

Assistant Professor: George S. Pahomov, Ph.D.

Professor of Philosophy: George L. Kline, Ph.D.

Prerequisites. An undergraduate major in Russian or an equivalent preparation with some work in literature. Applicants should submit scores in the Aptitude Test of the Graduate Record Examinations, a brief biography written in Russian, and at least one essay written in English on a literary topic. The English essay may have been written for an advanced undergraduate course or graduate seminar previously taken.

Allied Subjects. Any language or literature, economics, Russian history, Political Science, Russian philosophy.

Language Requirements. For the M.A., French or German. For the Ph.D., French, German, and one Slavic language other than Russian. Language skills will be tested by examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

Program and Examination for the M.A. Three units of work in Russian or in Russian and an allied field. The Final Examination

consists of a three-hour written examination and an oral examination of one hour.

Examinations for the Ph.D. The Preliminary Examinations consist of four written papers, one of which must be taken in an allied field, and an oral examination. The Final Examination will be devoted to the dissertation and the field in which it has been written.

General Degree Requirements for the M.A. and the Ph.D. See pages 14-16.

SEMINARS AND GRADUATE COURSES

Seminars offered each year are selected in accordance with the needs and interests of the students enrolled. Normally the same seminar is not given in two successive years. In cooperation with the Department of Slavic Languages of the University of Pennsylvania, the student may also register at that institution under the Reciprocal Plan (see page 12) for a unit of work chosen from the graduate courses offered in Slavic. Undergraduate 300-level courses, with additional work, may also be offered for graduate credit.

Mr. Davidson

Karamzin and Early Romanticism

Old Russian Literature

Russian Language: Structure and Teaching Methodology

Russian Prose of the Early Modern Period

Versification

Mr. Pahomov

Chekhov

Classics of Russian Drama from Fonvizin to Chekhov

Russian Romanticism

The Russian Short Story: Karamzin to Chekhov

Turgenev and Goncharov

Mrs. Pearce

History of the Development of the Russian Literary Language

History of the Russian Language: Phonology and Morphology

Old Church Slavic: Phonology and Morphology

Readings in Old Church Slavic

Studies in the Structure of Russian

Mr. Kline

Theory and Practice of Literary Translation

SELECTED UNDERGRADUATE COURSES

- 303 *Twentieth-Century Russian Literature*
 305 *Advanced Russian Grammar*
 306 *Russian Prose and Poetry of the Nineteenth Century*
 Philosophy 333b *Russian Philosophy*

Cooperation with the University of Pennsylvania. Attention is drawn to the graduate courses offered by the Department of Slavic Languages at the University of Pennsylvania. Students wishing to do so may register for a unit of work at the University under the Reciprocal Plan (see page 12).

Sociology

Professors: Judith R. Porter, Ph.D.

Eugene V. Schneider, Ph.D., *Chairman*

Associate Professor: Robert E. Washington, Ph.D.

Assistant Professor: Sheila Kishler Bennett, Ph.D.‡

Prerequisites. An undergraduate preparation in Sociology or some closely related social science is desirable. Students whose undergraduate training is not entirely adequate may be required to take certain undergraduate courses.

Major and Allied Subjects. Students may wish to take some work in related fields: anthropology, economics, psychology, political science, history, and statistics. In addition, courses in sociology and allied subjects may be taken at the University of Pennsylvania under the terms of the Reciprocal Plan (see page 12).

Language and Statistics Requirements. Candidates for the M.A. must offer one modern foreign language and statistics. Candidates for the Ph.D. degree must offer two modern foreign languages (usually French and German) or one modern foreign language and statistics. The statistics requirement will be tested by the Department or may be met by passing a graduate course in statistics.

Language skills will be tested by the examinations administered by Bryn Mawr College. Entering students may offer scores of the Graduate School Foreign Language Test (GSFLT) of the Educational Testing Service taken within twelve months of the date on which they begin graduate work at Bryn Mawr College.

‡ On leave 1980-81

Program and Examination for the M.A. The program consists of three units of work. The Final Examination may consist of one four-hour written paper, or one three-hour written paper and an oral examination of one hour.

Program and Examinations for the Ph.D. The Preliminary Examinations for candidates for the Ph.D. will consist of four three-hour written papers and an oral examination of one hour. These examinations will be in general sociology, sociological theory, and two special fields, one of which may be an allied field. The Final Examination will be devoted to the dissertation and the field in which it has been written.

General Degree Requirements for the M.A. and the Ph.D. See pages 14-16.

SEMINARS

Seminars will be given in special branches of Sociology, such as:

<i>Sociological Theory</i>	<i>Sociology of Poverty</i>
<i>Social Stratification</i>	<i>Political Sociology</i>
<i>Sociology of Religion</i>	<i>Sociology of Developing</i>
<i>Personality and</i>	<i>Countries</i>
<i>Social Structure</i>	<i>Sociology of the Family</i>
<i>Sociology of Knowledge</i>	<i>Social Change</i>
<i>Industrial Sociology</i>	<i>Research Design and</i>
<i>Causal Analysis</i>	<i>Statistical Analysis</i>
<i>Race Relations</i>	<i>Measurement</i>

UNDERGRADUATE COURSES

Under exceptional circumstances a student may be registered for an advanced undergraduate course which with additional work may be accepted for graduate credit.

Spanish

Professors: Joaquín González-Muela, *D. en Fil.*
Willard F. King, *Ph.D., Chairman*

Associate Professor: Eleanor K. Paucker, *Ph.D.*

Assistant Professor: Enrique Sacerio-Garí, *Ph.D.*

Professor of Philosophy: José María Ferrater Mora, *Lic. Fil., Ph.D.*

Prerequisites. An undergraduate major in Spanish (or the equivalent) which includes representative reading from both Spanish-American and peninsular Spanish literature. Applicants for admission in Spanish are asked to submit scores on the Aptitude Test and Advanced Test of the Graduate Record Examinations. They should submit one essay written in Spanish for an advanced undergraduate course and are strongly advised to arrange for a personal interview with a member of the Department.

Major and Allied Subjects. Students may specialize in any period of Spanish or Spanish-American literature. All Ph.D. candidates must complete one course in the history of the Spanish language. The following allied subjects are accepted: any literature, ancient or modern; European or Spanish-American history; classical or Romance philology; history of art.

Language Requirements. For the M.A., either German or one Romance language other than Spanish. For the Ph.D., German and French; in special cases the Department may accept other languages. The Ph.D. candidate's preparation must give evidence of adequate knowledge of Latin; if it does not, Latin must be included in the graduate program.

Language skills will be tested by examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

Program and Examination for the M.A. The program consists of three units of graduate work in Spanish or two units of graduate work in Spanish and one other in an allied field. An M.A. paper on a topic related to the work in one of the seminars is required. The Final Examination consists of a three-hour written section and an oral of one hour, both in Spanish.

Program and Examinations for the Ph.D. Students must complete a minimum of six units of graduate work, one and one-half of which may be in an allied subject. The Preliminary Examinations consist of four tests written in Spanish on both Spanish and Spanish-American topics and an oral examination. Suitable fields for these examinations should be discussed with the Chairman of the Department. The Final Examination is oral and devoted to the dissertation and the field in which it has been written.

General Degree Requirements for the M.A. and the Ph.D. See pages 14-16.

SEMINARS

The seminars are arranged to allow the widest possible choice for students over a two- or three-year period of study. Normally the same seminar will not be given two years in succession.

Mr. González-Muela

The History of the Spanish Language
The Medieval Castilian Epic and Lyric
Medieval Prose from Alfonso el Sabio to the Corbacho
Popular and Elite Styles in Golden Age Poetry
The Language of Poetry since 1950

Mrs. King

Ideological Currents in Renaissance Spain
Cervantes
The Spanish Novel of the Sixteenth and Seventeenth Centuries
Seventeenth-Century Drama
Modern Drama
Critical Approaches to Literature

Mrs. Paucker

Spanish Romanticism
The Urban Novel in Spain
Unamuno and Machado
The Novel of the Mexican Revolution
Gaucho Literature
Stylistics and Advanced Syntactic Analysis

Mr. Sacerio-Garí

Chroniclers of the New World
Borges and His Precursors
The New Latin American Novel
Modern Latin American Poetry

SELECTED UNDERGRADUATE COURSES

- 302a *Medieval Spanish Literature*: Mrs. Paucker
303a *The Modern Novel in Spain*: Mr. González-Muela
303b *Modern Poetry in Spain*: Mr. González-Muela
304a *Cervantes*: Mrs. King
304b *Poetry and Drama of the Golden Age*: Mrs. King
350b *Masters of the Short Story*: Mr. Sacerio-Garí

Appropriate graduate seminars at the *Centro de Estudios Hispánicos en Madrid* may be included in the program for the M.A. or the Ph.D. (see page 13).

Fees 1980-81

Application (payable by citizens of the United States and Canada and foreign students presently in the United States): \$25.

Tuition

Full-time students:

\$5350 a year

Part-time students:

2 academic units \$3570 a year (or \$1785 a semester)

1 academic unit \$1800 a year (or \$900 a semester)

Auditors:

Fees for auditors are the same as those for students registered in courses for credit.

Continuing enrollment (see page 8): \$225 a semester, except for students using Bryn Mawr College Laboratories for dissertation research. In these cases fees will be determined in consultation with the major department.

Bryn Mawr alumnae/i who have received one or more advanced degrees from Bryn Mawr College (M.A., M.S.S., M.L.S.P., Ph.D.) are entitled to take up to two units of work (four semester seminars) at one-half the normal tuition, subject to the following provisions:

1. Admission to all seminars must follow approved admissions procedures.
2. Specific seminars are open on a space-available basis.
3. Full tuition must be paid if the course is to be counted toward an advanced degree from Bryn Mawr College.

Payment of Fees

Both tuition and residence fees will be billed by semester. The Education Plan of monthly payment in cooperation with the Provident National Bank is available for those who prefer to pay fees in monthly installments. Direct correspondence to the Comptroller of the College.

Summary of Expenses for the Academic Year

Regular

Tuition Fee (full-time)	\$5350
Residence in graduate student housing	2650

Contingent

Application Fee	25
Continuing Enrollment Fee	450
Course in Reading German or French	100
(flat fee from September to February)	
Health Insurance (United States citizens)	82
Health Insurance (foreign students)	130
Graduation Fee for all Graduate Degrees	50
Charge for Microfilming Ph.D. Dissertation	42
Late Registration Fee	10
Add and Drop Fee	10
(after the first week of a new semester)	

Faced with the rising costs of higher education, the College has had to raise tuition each of the last seven years. Further increases may be expected.

Refund Policy

In the event of withdrawal from the Graduate School of Arts and Sciences, refunds will be made according to the following schedule:

For Semester I

Withdrawals August 31 to September 12	75%
Withdrawals September 13 through October 10	50%
After October 10	no refund

For Semester II

Withdrawals January 19 to January 30	75%
Withdrawals January 31 through February 20	50%
After February 20	no refund

For those students living at the Graduate Residence Center, the charge for residence is \$1600 in 1980-81. In accordance with the above schedule, if a student withdraws from graduate study, a partial refund will be made of the fee only if the College is able to re-assign the student's space to some other student not previously in residence. The student is not entitled to dispose of the room he or she leaves vacant.

Students wishing to eat in the College dining halls can buy meal tickets from the food service.

Procedure for Securing Refunds

Written notice must be received by the Dean at least one week prior to the effective date of withdrawal. Students who have received loans under NDSL or GSL to meet any educational expenses for the

current academic year must take an appointment with the Loan Officer before leaving the campus to arrange for appropriate repayment of the loans in question.

Exclusion

In the case of unsatisfactory work, or failure to pass the requirements for the M.A. or Ph.D., the department may recommend exclusion of a student to the Dean of the Graduate School of Arts and Sciences, who will notify the student of the decision. If the student wishes to appeal the decision, the Council of the Graduate School of Arts and Sciences (including the President) will hear the student and the department; the decision of the Council of the Graduate School of Arts and Sciences and the President will be binding.

A student whose behavior disrupts the normal conduct of academic affairs may be excluded by the Dean, in consultation with the student's department. If the student wishes to appeal the decision, a committee constituted of members of the Council of the Graduate School of Arts and Sciences of the faculty and members of the Graduate Student Council will hear the student, the chairman of the department, and the Dean. The committee will make its recommendations to the President; the President's decision will be binding.

In cases of exclusion, fees will not be refunded or remitted in whole or in part; fellowships, scholarships and assistantships will be cancelled.

Students' Rights and Responsibilities

Equality of Opportunity

Bryn Mawr College admits students of any race, color, national and ethnic origin as well as the handicapped, to all the rights, privileges, programs and activities generally accorded or made available to students at the College. It does not discriminate on the basis of race, color, or national or ethnic origin or handicap in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other College-administered programs or in its employment practices.

To aid the handicapped, regional alumnae/i will provide reading

services, orientation sessions and other services to applicants who make the College aware of their physical disabilities.

As required by Title IX of the 1972 Federal Education Amendments, it is also the policy of Bryn Mawr College not to discriminate on the basis of sex in its educational programs, activities, or employment practices. The admission of women in the Undergraduate College is in conformity with a provision of the Act. Inquiries regarding compliance with Title IX and other policies of non-discrimination may be directed to the Assistant to the President, Taylor Hall, or the Director of the Office for Civil Rights, Department of Education, Washington, D.C.

Family Educational Rights and Privacy Act of 1974

The Family Educational Rights and Privacy Act of 1974 was designed to protect the privacy of education records, to establish the right of students to inspect and review their education records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students have the right to file complaints with the Family Educational Rights and Privacy Act Office (FERPA), Department of Education, 5411 Switzer Bldg., 330 C Street, SW, Washington, D.C. 20201, concerning alleged failures by the institution to comply with the Act.

Copies of Bryn Mawr's policy regarding the Act and procedures used by the College to comply with the Act can be found in the Office of the Dean. The policy is printed in the Bryn Mawr-Haverford Academic Regulations, which also list all education records maintained on students by this institution.

Questions concerning the Family Educational Rights and Privacy Act may be referred to the Office of the Graduate Dean.

Designation of Directory Information

Bryn Mawr College hereby designates the following categories of student information as public or "Directory Information." Such information may be disclosed by the institution for any purpose, at its discretion.

Category I Name, address, dates of attendance, class

Category II Previous institution(s) attended, major field of study, awards, honors, degree(s) conferred

Category III Date of birth

Category IV Telephone number

Category V Marital Status

Currently enrolled students may withhold disclosure of any category of information under the Family Educational Rights and Privacy Act of 1974 by written notification which must be in the Office of the Recorder, Taylor Hall, by 5 p.m. on the last Friday in September. Forms requesting the withholding of "Directory Information" are available in all Deans' offices and in the Office of the Recorder.

Bryn Mawr College assumes that failure on the part of any student to specifically request the withholding of categories of "Directory Information" indicates individual approval for disclosure.

Fellowships and Graduate Scholarships

Fellowships and graduate scholarships are provided from the general funds of the College, from the gifts of alumnae and other generous donors, and from government agencies and private foundations. The majority of these awards are made on the basis of an annual competition. Fellowships carry a stipend of \$3500 in addition to tuition and are available only to students who have completed one full year of graduate work. Graduate scholarships have a value of \$3000 in addition to tuition and may be held by citizens and non-citizens and by students at all levels of graduate work leading to the M.A. or Ph.D. degree. Other awards vary in value.

Application

Application from citizens of the United States and Canada should be made to the Dean of the Graduate School of Arts and Sciences and must be filed complete not later than February 1. In writing for forms applicants should state their fields of concentration. Applications from foreign students must be received not later than January 25. Scores of the Test of English as a Foreign Language (TOEFL) or the examination of the English Language Institute of the University of Michigan must be included.

Graduate and Professional School Financial Aid Service

The Graduate School of Arts and Sciences is a participant in the Graduate and Professional School Financial Aid Service (GAPSFAS), Educational Testing Service, Princeton, New Jersey 08540. All applicants for financial aid must file a GAPSFAS form, Application for Financial Aid for the Academic Year 1981-82. Copies of the form are available locally in most colleges and universities; they may also be obtained by writing directly to Princeton. The completed form must be returned to the Graduate and Professional School Financial Aid Service by January 9.

Fellowships in the Award or Nomination of the College

Bryn Mawr College Fellowships of \$3500 in addition to tuition are offered annually in Anthropology, Biochemistry, Biology, Chemistry, Classical and Near Eastern Archaeology, Economics, Education and Child Development, English, French, Geology, German, Greek, History, History of Art, Latin, Mathematics, Philosophy, Physics, Political Science, Psychology, Russian, Sociology, and Spanish.

Alumnae Association Fellowships are provided from the contributions of former graduate students to the Alumnae Fund; from the Alumnae Regional Scholarship Committees of Eastern Pennsylvania, Southern New Jersey, and Delaware and of New York and Southern Connecticut, and from the Alumnae Association of Cambridge and of New Haven.

Marion Louise Ament Fellowship. Graduate fellowships in Spanish are occasionally awarded from the fund established in 1966 in honor of Marion Neustadt, Class of 1944.

The Elizabeth Eaton Butterfield Fund for Graduate Scholarships was established in 1978 as a memorial by friends and family of Mrs. Butterfield, Class of 1935, founder and for many years President of the Bryn Mawr Book Sale of Cambridge, Massachusetts.

The Henry Joel Cadbury Fellowship Fund in the Humanities was established in 1973 by the Board of Bryn Mawr College in honor of Henry Joel Cadbury, Trustee Emeritus. The fund was made possible by donations from current and former trustees and directors of the College and friends of Dr. Cadbury in order to provide annual support for graduate students in the Humanities who have reached an advanced stage of their graduate work.

The Bertha Reed Coffman Fellowship Fund was established in 1964 through the estate of Bertha Reed Coffman, a teaching fellow at the College in 1906-1907.

The Theodore N. Ely Fund. A fellowship or scholarship in Art or Archaeology is awarded to a graduate student from the interest on this fund, which was established in 1959 by bequest of Katrina Ely Tiffany, Class of 1897.

The Folly Ranch Fund was established by an anonymous gift in 1974. The income is used for graduate and undergraduate scholarships in honor of Eleanor Donnelley Erdman, Clarissa Donnelley Haffner, and Elizabeth P. Taylor, Class of 1921, and Jean T. Palmer, Class of 1924.

The Grace Frank Graduate Fellowship Fund in the Humanities was established in 1979 in memory of Grace Frank who taught French at Bryn Mawr from 1936 to 1951. The income is used to provide graduate fellowships to students in the humanities.

The Margaret Gilman Fund. A fellowship or scholarship in French is awarded from the interest on this fund, which was established in 1958 by bequest of the late Margaret Gilman, Professor of French at Bryn Mawr College.

The Howard Lehman Goodhart Fellowship is awarded to an advanced student in medieval studies.

The Helen Schaeffer Huff Memorial Research Fellowship is awarded for a year of research work in Physics or Chemistry at Bryn Mawr College. If other qualifications are equal among a number of candidates, preference will be given to a student whose field of research overlaps the fields of Chemistry and Physics. This fellowship is normally awarded to a postdoctoral candidate to allow continuation of a research program. In such cases the stipend will be \$7500. In exceptional cases, candidates who have not completed the work for the doctorate will be considered. For such students the stipend will be less, the amount to be determined on the basis of the candidate's qualifications.

The Anne Cutting Jones and Edith Melcher Scholarship Fund was established in 1972 from the estates of Anne Cutting Jones (Ph.D. 1925) and her close friend for many years Edith Melcher (A.B. 1923, M.A. 1924, and Ph.D. 1928). The income is used for scholarships for graduate and undergraduate students in French.

The S. Maude Kaemmerling Scholarship was established in 1959 by the estate of S. Maude Kaemmerling and increased by a gift in 1965. The income on the fund is to be used for graduate scholarships and fellowships.

The Louise Kingsley Scholarship Fund was established in 1972 through the bequest of Dr. Kingsley (Ph.D. 1931). Income from the fund is used for graduate scholarships and fellowships.

The Melodee Siegel Kornacker Fellowship in Science was established in 1976 by Melodee Siegel Kornacker, Class of 1960. The income is used for a graduate fellowship in Biology, Chemistry, Geology, Physics, or Psychology.

The Samuel H. Kress Foundation Fellowships in varying amounts are awarded to advanced graduate students in History of Art.

The Mabel Gibson La Foy Fund for Graduate Tuition Grants was established in 1975 by Margaret La Foy Rossiter (M.A. 1938, Ph.D. 1941) in honor of her mother, Mabel Gibson La Foy.

The Elizabeth R. Laird Scholarship Fund was established in 1969 by the will of Elizabeth R. Laird, Ph.D. 1901. The income is used for graduate scholarships in any field of study.

The Katharine Elizabeth McBride Fellowship. In the 75th Anniversary Year a fund for a graduate fellowship in honor of Katharine McBride, President of the College from 1942 to 1970, was established by certain alumnae. The endowment of this fellowship was increased by a gift from the Class of 1925 on its 40th reunion. The fellowship is awarded in any department to a candidate for the Ph.D. degree who is about to complete two years or more of graduate work.

The Emmy Noether Fellowship was founded by gifts from many donors in memory of Emmy Noether who came to Bryn Mawr College from Germany in 1933 and who died April 14, 1935. It is open to students in the United States and in foreign countries who are advanced graduate students of Mathematics. It is awarded by the Department of Mathematics of Bryn Mawr College and may be used, subject to the approval of the Department, at any institution in the United States or in a foreign country.

The Max Richter Fellowship Fund was established in 1962 and increased in 1965 by gifts from the Trustees of the Richter Memorial Foundation. Income from the endowment provides fellowship to advanced students interested in public affairs.

The Mildred Clarke Pressinger von Kienbusch Fellowship was established in 1964 by a gift in honor of Mildred Clarke Pressinger von Kienbusch of the Class of 1909. The income on this fund is to be used for a graduate student working toward the doctorate. This award may be made to a beginning graduate student.

The Bertha Haven Putnam Fellowship in History Fund was established in 1960. The income from the fund is used for fellowships or scholarships in history.

The Mildred and Carl Otto von Kienbusch Fellowships were established in 1977 by bequest of Carl Otto von Kienbusch. The income on this fund is to be used for graduate students working toward the doctorate. These awards may be made to beginning graduate students.

Scholarships and Fellowships under the Plan for the Coordination of the Sciences. The departments of the natural sciences and Mathematics administer a fund for the Coordination of the Sciences, given to the College in 1935 by the Carnegie Corporation of New York. Its purpose is to encourage and facilitate teaching and research in fields such as biochemistry, biophysics, geochemistry, geophysics, and psychophysics.

From this fund, the Committee for the Coordination of the Sciences awards fellowships, scholarships, assistantships, post-doctoral research fellowships, or other grants as seem appropriate.

The Mary Waddell Fellowship Fund provides grants of \$1000 each for the study of Mathematics to daughters of American citizens of Canadian descent.

Whiting Fellowships in the Humanities are awarded to students in their final dissertation year. Each fellowship carries a stipend of \$600 per month, plus tuition, together with a modest allowance for research expenses and a family allowance if needed. These fellowships are available in the Departments of Classical and Near Eastern Archaeology, English, French, German, Greek, History, History of Art, Latin, Music, Philosophy, Russian, and Spanish.

Fellows by Courtesy. Fellows who continue their studies at the College after the expiration of their fellowships may, by a vote of the Trustees, receive the rank of Fellow by Courtesy.

Honorary Fellows. Students who are awarded fellowships on academic merit and who decline the financial benefits of the award receive the title of Honorary Fellow.

Travelling Fellowships

The Bryne-Rubel Fund was established in 1973 by the estate of Eva W. Bryne, B.A. 1916, M.A. 1917, and Ph.D. 1925. The income of the estate may be used to fund one or more one-year fellowships in English, Latin, Greek, or Archaeology to a graduate student at Bryn Mawr for study outside the United States. The Bryne-Rubel Fellowships may also be used by students in English or Latin at Bryn Mawr.

The Christopher Fund was founded by an anonymous donor in 1977. The income is to be used for travel expenses of Bryn Mawr

graduate students to Villa Massenzia in Rome. If not required for Massenzia, then the income should be used for travel costs of graduate students in Classical and Near Eastern Archaeology studying in the Mediterranean.

Massenzia Scholarships for use at the Villa Massenzia in Rome (see page 13) are awarded to students whose program requires them to stay in Rome for one year.

The Anna Ottendorfer Memorial Research Fellowships in Teutonic philology and German language and literature, founded in 1907 by Mrs. Anna Woerishoffer in memory of her mother, is to be applied to the expense of study and residence for one year at a German university. It is awarded to a student who has completed at least one year of graduate study at Bryn Mawr College and who shows ability to conduct independent investigations in the fields of Teutonic philology or German literature. The choice of a university is determined by the holder's preference, subject to the approval of the faculty.

The Ella Riegel Fellowship or Scholarship in Classical Archaeology was founded in 1937 by bequest of Ella Riegel. It is awarded on the recommendation of the Department of Classical and Near Eastern Archaeology to advanced students in this subject. It is given for study abroad but may, at the discretion of the Department, be used at Bryn Mawr College.

The Fanny Bullock Workman Travelling Fellowship for a year of study or research abroad was established in 1927 by bequest of Fanny Bullock Workman and by gift of her husband, Dr. W. Hunter Workman. It is awarded to a candidate for the degree of Doctor of Philosophy at Bryn Mawr College who could not have the advantages of such a year without assistance. At the discretion of the faculty, the fellowship for any one year may be divided between two students, or the same student may hold the fellowship for more than one year.

Graduate Scholarships

Bryn Mawr College Graduate Scholarships of \$3,000 each in addition to tuition are offered annually to students for work in any department of the Graduate School of Arts and Sciences.

Scholarships for Foreign Students. These scholarships are designated for foreign students who have excelled in their university studies. Applicants must have had three or four years of university training. Each scholarship carries a stipend which covers full tuition and residence in graduate student housing during the

academic year. (Meals during vacations are not included and students will need to provide their own funds for these and other expenses.) Scholarship holders are expected to carry a full program of graduate work and to attend regularly the courses for which they are registered. Work is given in seminars or small discussion groups in which the students, as well as the instructor, actively participate. It is essential, therefore, that the student be able not only to read and write English, but to understand it and speak it fluently.

The Marguerite N. Farley Scholarships for Foreign Students, which provide tuition and a stipend to cover room and board on campus, are offered to students from any country outside the United States and Canada. Occasionally a fellowship is awarded from this fund to a foreign student who has completed at least one year at Bryn Mawr.

A special British Scholarship, which provides tuition and a stipend to cover room and board on campus, is awarded to students from the United Kingdom who are sponsored by The English-Speaking Union.

Special Foreign Scholarships for French, German, Hebrew, Italian, and Spanish, which provide tuition and a stipend to cover room and board on campus plus \$250, have been established for students whose languages form a part of the Bryn Mawr curriculum. Holders of these scholarships are asked to devote four or five hours a week to supervised teaching or other assistance in the appropriate language department. The Special Scholarship for French has been named in memory of Marcelle Pardé who was a member of the French Department of Bryn Mawr College between 1919 and 1929. The Special Scholarship for Spanish has been named in memory of Miguel Catalan, distinguished Spanish physicist and friend of Bryn Mawr.

Duties of Fellows and Scholars

Fellows and Graduate Scholars are required to carry a full academic program at Bryn Mawr College. They are expected to attend official functions. Fellows are not permitted to accept other appointments. Scholars, with the permission of the Dean of the Graduate School of Arts and Sciences, may undertake a limited amount of paid work.

Each Travelling Fellow is asked to present a written report of the work done during the fellowship year. This report should be submitted to the Dean of the Graduate School of Arts and Sciences for transmittal to the student's department by about May 1.

Assistantships

Teaching Assistantships are available in some departments. These positions carry salaries of \$4200-4410 for half-time work, \$2800-2940 for one-third-time work, and include tuition without fee. The duties differ with departments. In science departments, assistantships provide teaching and laboratory experience.

Graduate Assistantships are available in some departments. These positions provide full-time tuition and wages according to the hours of work given to the department.

Research Assistantships are available in the Department of Biology, Chemistry, Geology, Physics, and Psychology.

All Assistants are expected to maintain good academic standing during their terms of appointments. In cases of academic exclusion (p. 83), assistantships are cancelled.

Internships and Field Work Placements. The Department of Education and Child Development offers each year one internship, with stipend, in school psychology. The intern is placed in the Child Study Institute and receives individual supervision there. Supervised practicum experience at the Institute is also available, usually without stipend.

Supervised field work placements, with stipend, are available in school counseling. These are open to advanced, highly qualified candidates in the school counseling program sequence. Supervised practicum experience in counseling is also available, usually without stipend.

Tuition Grants

Tuition grants are available for full-time and part-time students. Gifts from the Alumnae Fund have increased the number of these grants.

Graduate Prize

The Susan B. Anthony Memorial Prize, commemorating the great work of Susan B. Anthony for women, was founded by her friend, Anna Howard Shaw, and her niece, Lucy E. Anthony. It is offered from time to time to a graduate student at Bryn Mawr College who has published or submitted in final form for publication the best study dealing with the industrial, social, economic, or political position of women. The award is made by a committee of which the President of the College is chairman.

Loan Funds

National Direct Student Loan Program. These loans are available to students who are United States citizens or permanent residents and who are registered for at least two units of graduate work. Application is made on a special form which is obtained from the Loan Officer after a student has been admitted to the Graduate School of Arts and Sciences. The application and a GAPS FAS form (see page 7) must be filed by August 1. Allocation of loan funds is made late in August.

Guaranteed State Loan Program. Students are encouraged to apply for Guaranteed State Loans, available to United States citizens who are studying at least half-time, through their local banks. Part of the application is completed by the Loan Officer.

All students who are applying for National Direct Student Loans are advised that GAPS FAS PART III is required from those who do not meet the governmental definition of independent student. Therefore, if you expect to apply for a National Direct Student Loan, complete Part III if, during the last twelve months, you a) resided for more than six consecutive weeks with, or b) have been claimed as a federal income tax deduction by, or c) have been the recipient of an amount in excess of \$750 from one (or both) of your parents.

The Students' Loan Fund of the Alumnae Association of Bryn Mawr College was established by the Class of 1890 for the use of students who need to borrow money in order to continue their college work and for the purpose of receiving contributions, no matter how small, from those who are interested in helping students obtain an education. The fund is managed by the Alumnae Scholarships and Loan Fund Committee.

Loans may be used for purposes approved by the Committee, who try to provide small loans to meet special emergencies or to help with tuition payments. As a rule, money is not lent students in their first semester of graduate work. Not more than \$500 may be borrowed by a student in any one year. The total for four years must not exceed \$1500.

While the student is in college no interest is charged; after the student leaves college the interest rate is modest. The entire principal must be repaid within five years from the time the student leaves college at the rate of twenty percent each year. Students who wish to borrow from the Loan Fund may obtain application blanks for

this purpose from the Office of Admissions and Awards of the Graduate School of Arts and Sciences.

U.S. Steel Foundation Graduate Level Loan Program. A fund of \$10,000 has been established for students in Anthropology, Biology, Biochemistry, Chemistry, Economics, Education and Child Development, Geology, History, Physics, Political Science, Psychology and Sociology. Loans of amounts up to \$2000 will be made to cover expenses in connection with tuition, books, research equipment, living expenses, travel, summer research. Conditions are as for the Alumnae Association Loan Fund, see above.

Career Planning Office

Graduate students are invited to make use of the services of the Career Planning Office. These services include counseling on career interests and concerns; information on specific openings for summer, temporary and permanent, full- and part-time positions; consultation on job-hunting methods. Upon request the Career Planning Office also maintains and makes available to prospective employers the credentials of graduate students and alumnae. The credentials include curriculum vitae and faculty and employer references.

Graduate Student Council

The Graduate Student Council, composed of one representative elected annually from each department offering a graduate program, is the instrument through which graduate students may voice their concerns and needs to the faculty and administration. When appropriate, the Council also initiates and carries out specific programs to meet these needs.

Graduate students work primarily in one department, so that the Council provides a means of communicating with students in all departments. Council meetings are held at least once a month in the Graduate Lounge located in the M. Carey Thomas Library. Graduate student opinion is sometimes solicited through questionnaires, so that the Council may best represent various opinions.

Representatives of the Council sit on various College committees such as those concerned with the Library and computer services. In addition, the Council is represented at meetings of the Board of Trustees.

The Council also plays a major role in devising policies and procedures for on-campus graduate housing.

Graduate Student Housing

Housing is available for about forty-three graduate students in the Glenmede Graduate Residence Center which consists of single rooms and three large double rooms in the main house, and a number of single rooms in the smaller houses on the estate. The College provides basic furniture; students supply linen, bed pillows, desk lamps, rugs, curtains and any other accessories they need. (Local rental services will supply sheets, blankets, and pillowcases for a modest fee. Arrangements may be made on arrival.) Because of college fire regulations, smoking is not permitted in the bedrooms. There are smokers on certain floors.

There is no food service in the center. Graduate students can avail themselves of kitchen facilities on a cooperative basis. Meal tickets can be bought for complete meal service or for incidental purchases of meals in the College dining rooms on campus.

Application for a room should be made as early as possible. A room contract, which will be sent upon request, must be signed and returned to the Office of the Graduate School of Arts and Sciences with a *deposit of ten dollars*. The deposit will be deducted from the residence fee; it will be refunded only if the student cannot be accommodated.

A student who has reserved a room will be held responsible for the residence charge unless notice of withdrawal is sent in writing to the Dean of the Graduate School of Arts and Sciences by August 15.

The regular charge for residence (room) for graduate students is \$1,600 a year, payable one half by September 1 and the other half by January 1. Although the Graduate Residence Center may be closed during the Christmas and spring vacations, when health service is not provided, residence on campus covers the period from the opening of College in the fall until Commencement Day. Baggage will be accepted at the College after August 20. It should be sent prepaid, addressed to the proper residence hall, and marked with the owner's name.

Health

Medical Services

The College maintains an Infirmary, with in-patient and out-patient services, open during the academic year but closed in the summer. There is twenty-four hour physician and RN coverage. The medical staff may be consulted without charge by students residing in campus housing. Students living off campus pay for health services, as rendered, at a nominal fee. If special consultation or private nursing care are necessary, the student must meet the expense. The College reserves the right to require a student to withdraw, for reasons of health, upon the recommendation of the College Physician.

A Counseling Service is available to all students. Consultation with a psychological social worker or psychiatrist should be arranged by appointment through the Infirmary Secretary. Counselors can be reached through the Infirmary in cases of emergency. A charge, determined on a sliding scale based on ability to pay, is made for visits to the Counseling Service in excess of four. Should long term therapy be necessary, the student is referred for outside private care.

The Infirmary offers use of its rooms for sleeping privileges, without meals or nursing care, for about \$6.00 a night (1980 rate).

Medical Requirements

All entering students must file medical history and evaluation forms with the Infirmary before registration for classes.

Insurance

All graduate students are urged to carry health insurance valid in the United States. For those who need coverage, student policies are offered and should be purchased by September first.

Child Care

The Phebe Anna Thorne School

Situated on the Bryn Mawr Campus, and integral to the Department of Education and Child Development, the Thorne School is a laboratory school which enrolls young children from nearby communities in creative, pre-kindergarten programs. The School has for its aim the fullest and happiest development of each child within the context of a group and offers half day sessions Monday through Friday, September-May. For fees and information, write to or telephone the Director, The Phebe Anna Thorne School, Bryn Mawr College, Wyndon and Roberts Road, Bryn Mawr, Penna. 19010. (215) 527-5490.

New Gulph Children's Center

Child care on a space available basis for Bryn Mawr college families may be found at the New Gulph Children's Center, Conestoga and Sproul Rds., Villanova, just ten minutes from campus. Children 3 months through 6 years old are eligible. The center is open five days a week, 7:30 a.m.-5:30 p.m.

The center, conducted by professional staff, incorporates appropriate age group developmental activities with high quality group care, plus nursery school and kindergarten programs. Flexible schedules can be arranged to accommodate the programs of students. A minimum of nine hours regular use per week is required.

The fee scale is based on the age of the child and the number of hours at the center. Tuition for the semester is payable in advance. Financial assistance is available. Early registration for all programs is essential. For more information contact the Director at 688-2411.

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From the North and Northeast

The College is most easily reached using the Schuylkill Expressway (I-76). From the North and Northeast there are three approaches to I-76.

1. Walt Whitman Bridge, I-676 to I-76
2. Benjamin Franklin Bridge, I-76 (Vine Street) continuing west on I-76
3. Pennsylvania Turnpike to Exit 24 (Valley Forge Exit) continuing east on I-76

From these approaches you may use the following routes:

1. CITY AVENUE Take Exit 41 (City Avenue-U.S. 1 South) and proceed on City Avenue until City Avenue intersects route 30 (Lancaster Avenue). Turn right on Lancaster Avenue and drive approximately four miles to reach the center of Bryn Mawr. Turn right on Morris Avenue (Arco gas station) and follow the underpass. There is a College parking lot one and one-half blocks along Morris Avenue on the left.
2. GULPH MILLS Take Exit 27 (PA 320, Gulph Mills). Follow PA 320 south and turn left at the first traffic light onto Old Gulph Road. The College is three miles down the road on the right. A College Parking lot is located the third entrance on the right after Roberts Road

From the West

Pennsylvania Turnpike to Exit 24 (Valley Forge Exit). Continue east on I-76 and take the Gulph Mills route described above.

From the South

Follow I-95 through Wilmington, Delaware, to Chester, Pennsylvania, then take the PA 352-Edgemont Avenue Exit. Immediately look for, and follow, signs for PA 320 North. Continue north on PA 320 for approximately 10.5 miles. Turn right on Bryn Mawr Avenue and follow until it crosses Lancaster Avenue and joins Morris Avenue. Turn left on Morris Avenue and follow the underpass. There is a College parking lot one and one-half blocks along Morris Avenue on the left.

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Bryn Mawr College Calendar

BRYN MAWR

Undergraduate College

1980-82



Bryn Mawr College Calendar

Undergraduate Courses

Issue for the Sessions of 1980-82

August 1980, Volume LXXIII, Number 3

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Visitors to the College are welcome and when the College is in session student guides are available to show visitors the campus. Appointment for interviews and for campus tours should be made in advance by letter or by telephone. The Admissions Office is open Monday through Friday from nine until five and on Saturdays from nine until one when the College is in session.

Correspondence

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Correspondence about the following subjects should be addressed to:

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General interest of the College

The Dean

Academic work, personal welfare, and health of the students

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The Dean of the Graduate School of Arts and Sciences

Admission and graduate scholarships

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The Business Office

Payment of bills

The Director of the Career Planning Office

Recommendations for positions and inquiries about students' self-help

The Alumnae Association

Regional scholarships and loan fund

Academic Schedule 1980-81

1980		<i>First Semester</i>
<i>August</i>	29	Halls of residence open to Customs Week Committee
<i>August</i>	30	Halls of residence open to entering class at 8 a.m. Registration of entering undergraduate students
<i>September</i>	2	Hall of residence open to returning undergraduates at 8 a.m. Registration of returning students
<i>September</i>	4	Work of the 96th academic year begins at 9 a.m.
<i>September</i>	5-6	Deferred examinations
<i>September</i>	8	French examinations for undergraduates
<i>September</i>	9	Greek, Latin, and Mathematics examinations for undergraduates
<i>September</i>	15	German and Russian examinations for undergraduates
<i>September</i>	16	Hebrew, Italian, and Spanish examinations for undergraduates
<i>September</i>	18-19	Confirmation of course registration and CR/NC
<i>October</i>	11	Parents' Day
<i>October</i>	17	Fall vacation begins after last class
<i>October</i>	22	Fall vacation ends at 9 a.m.
<i>November</i>	24, 25	Second semester registration
<i>November</i>	26	Thanksgiving holiday begins after last class
<i>December</i>	1	Thanksgiving holiday ends at 9 a.m.
<i>December</i>	12	Last day of semester I classes
<i>December</i>	13-16	Review period
<i>December</i>	16	Written work due
<i>December</i>	17-23	College examinations for semester I
<i>December</i>	23	Winter vacation begins

1981		<i>Second Semester</i>
<i>January</i>	19	Work of the second semester begins at 9 a.m.
<i>January</i>	29-30	Confirmation of registration and CR/NC
<i>January</i>	30-31	Deferred examinations
<i>March</i>	13	Spring vacation begins after last class
<i>March</i>	23	Spring vacation ends at 9 a.m.
<i>April</i>	10-12	Geology field trip
<i>April</i>	20	French and German examinations for undergraduates
<i>April</i>	21	Greek, Hebrew, and Latin examinations for undergraduates
<i>April</i>	22	Italian and Spanish examinations for undergraduates
<i>April</i>	23	Mathematics and Russian examinations for undergraduates
<i>April</i>	23-24	Registration for 1981-82
<i>May</i>	1	Last day of semester II classes
<i>May</i>	2-5	Review period
<i>May</i>	5	Written work due
<i>May</i>	6-15	College examinations for semester II
<i>May</i>	17	Conferring of degrees and close of the 96th academic year
<i>May</i>	29-31	Alumnae Weekend

Academic Schedule 1981-82

Tentative Schedule

1981		<i>First Semester</i>
<i>September</i>	3	Classes begin
<i>October</i>	16	Fall vacation begins after last class
<i>October</i>	21	Fall vacation ends at 9 a.m.
<i>November</i>	25	Thanksgiving vacation begins after last class
<i>November</i>	30	Thanksgiving vacation ends at 9 a.m.
<i>December</i>	11	Last day of classes
<i>December</i>	12-15	Review period
<i>December</i>	16-22	Examination period

1982		<i>Second Semester</i>
<i>January</i>	18	Classes begin
<i>March</i>	12	Spring vacation begins after last class
<i>March</i>	22	Spring vacation ends at 9 a.m.
<i>April</i>	30	Last day of classes
<i>May</i>	5-14	Examination period
<i>May</i>	16	Commencement

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- Lyne Harmon, M.S.W. (Smith College), *Part-time Visiting Lecturer in Social Work and Social Research*
- Ruth B. Harvey, Ph.D. (Bryn Mawr College), *Lecturer in Education and Child Development*
- Margaret M. Healy, Ph.D. (Bryn Mawr College), *Part-time Lecturer in Philosophy and Treasurer of the College*
- Patrick Henry, Ph.D. (Yale University), *Part-time Visiting Lecturer in History of Religion under the exchange program with Swarthmore College*

- Alice L. Hoersch, Ph.D. (Johns Hopkins University), *Part-time Visiting Lecturer in Geology*
- Maryann M. Jones, Ph.D. (University of Virginia), *Lecturer in Biology*
- Christopher Kendrick, M. Phil. (Yale University), *Lecturer in English*
- Nancy J. Kirby, M.S.S. (Bryn Mawr College), *Lecturer in Social Work and Social Research*
- David Lachterman, Ph.D. (Harvard University), *Part-time Visiting Lecturer in Philosophy under the exchange program with Swarthmore College*
- Carolyn H. Lee, M.S.S. (Bryn Mawr College), *Part-time Visiting Lecturer in Social Work and Social Research*
- Ramona Livingston, A.B. (William Jewell College), *Lecturer in English*
- Marcia L. Martin, M.S.W. (University of Pennsylvania), *Lecturer in Social Work and Social Research*
- Ruth W. Mayden, M.S.S. (Bryn Mawr College), *Lecturer in Social Work and Social Research and Assistant Dean of the Graduate School of Social Work and Social Research*
- Patrick T. McCarthy, M.S.W. (University of Pennsylvania), *Part-time Lecturer in Social Work and Social Research*
- Jane R. McConnell, Ph.D. (Bryn Mawr College), *Part-time Lecturer in Biology*
- Braulio Montalvo, M.A. (Columbia University), *Part-time Visiting Lecturer in Social Work and Social Research*
- Gloria F. Pinney, Ph.D. (University of Cincinnati), *Lecturer in Classical and Near Eastern Archaeology*
- Betzabé D. Praeger, Ph.D. (University of Delaware), *Lecturer in Biology*
- Patricia O. Pruett, Ph.D. (Bryn Mawr College), *Part-time Lecturer in Biology and Associate Dean for Special Academic Programs*
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- Willie V. Small, M.S.W. (University of Michigan), *Part-time Visiting Lecturer in Social Work and Social Research*

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Donald M. Weyl, M.P.A. (Pennsylvania State University), *Part-time Visiting Lecturer in Social Work and Social Research*

Robert H. Wozniak, Ph.D. (University of Michigan), *Katharine E. McBride Lecturer in Education and Child Development*

Instructors

Linda C. Haviland, M.Ed. (Temple University), *Part-time Instructor in Dance*

Charles Loughhead, A.B. (University of California-Los Angeles), *Part-time Instructor in English*

Paula Mason, B.S. (University of Wisconsin), *Part-time Instructor in Dance*

Paula Mayhew, M.A. (Columbia University), *Part-time Instructor in English*

Anne C. Solderitsch, M.S. (Lehigh University), *Part-time Instructor in Mathematics*

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Erika Rossman Behrend, Ph.D. (University of Pennsylvania), *Part-time Laboratory Coordinator in Psychology*

Alice S. Powers, Ph.D. (Bryn Mawr College), *Part-time Laboratory Coordinator in Psychology*

Elizabeth Shimer, Ph.D. (Baylor University), *Part-time Laboratory Coordinator in Physics*

Director of the Haverford-Bryn Mawr Orchestral/Choral Program

Tamara Brooks, M.S. (Juilliard School of Music), D.F.A., *Professor of Music at Haverford College†*

Curator

Carol W. Campbell, M.A. (University of Pennsylvania), *Curator of Slides and Photographs*

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Tayyeb Atashroo, M.S.P.H. (Tehran University), *Assistant in Chemistry*

Marguerite Billbrough, B.A. (Rosemont College), *Assistant in Biology*

Maria Brown, B.A. (Temple University), *Assistant in Sociology*

- Linda Caron, M.A. (Bryn Mawr College), *Assistant in History of Art*
David Coulter, B.A. (Earlham College), *Assistant in Geology*
Jacqueline Cranney, B.A. (University of Queensland), *Assistant in Psychology*
Laura Daruns, M.A. (Bryn Mawr College), *Assistant in Psychology*
Jeanette L. Dickerson, M.A. (Arizona State University), *Assistant in Anthropology*
Ruth Duffy-Downey, A.B. (Immaculata College), *Assistant in Chemistry*
Michael F. Forte, B.S. (East Carolina University), *Assistant in Biology*
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- Leo M. Dolenski, M.A. (Catholic University of America), M.L.S. (Drexel University), *Manuscripts Librarian and Archivist*
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- Florence D. Goff, M.A., M.S.L.S. (Villanova University), *Reference Librarian*
- Karen K. Helm, M.S.L.S. (Villanova University), *Rare Book Cataloguer*
- Mary S. Leahy, M.A. (Bryn Mawr College), *Rare Book Librarian*
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- Alexandra Quandt Aldridge, A.B. (Bryn Mawr College), *Director of Resources*
- Jay M. Anderson, Ph.D. (Harvard University), *Director of Computing Services and Professor of Chemistry*
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Health

- Frieda W. Woodruff, M.D. (University of Pennsylvania), *College Physician*
Eileen A. Bazelon, M.D. (Medical College of Pennsylvania), *Consulting Psychiatrist*
Mary Geiger, M.D. (State University of New York at Albany), *Consulting Psychiatrist*
John F. Howkins, M.D. (Columbia University), *Consulting Psychiatrist*
Luella M. Kennedy, M.S.S. (Bryn Mawr College), *Counselor*
Jenepher P. Shillingford, M.Ed., *Director of Physical Education*
Margaret S. Temeles, M.D. (Tufts University School of Medicine), *Consulting Psychiatrist*

Physical Education

- Jenepher P. Shillingford, M.Ed. (Temple University), *Director of Physical Education*
Linda Fritsche Castner, M.S. (Smith College), *Assistant Director of Physical Education*
Linda Caruso Haviland, M.Ed. (Temple University), *Part-time Instructor in Dance*
Elaine E. Johnson, M.S. (Indiana State University), *Instructor in Physical Education*
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Leigh Straub, B.S. (Ursinus College), *Instructor in Physical Education*
Lee Wallington, B.S.Ed. (Bowling Green State University), *Instructor in Physical Education*

Halls of Residence

- Nina Baranova, M.A. (Norwich University), *Warden of Russian House*
 Rebecca Bicker, B.A. (Washington University), *Warden of Pembroke East*
 Sara Fairbanks, A.B. (Wilson College), *Warden of Merion*
 Faith Baum Gardner, B.A. (Hartwick College), *Warden of Radnor*
 Antonia Holden, M.A. (Bryn Mawr College), *Warden of Denbigh*
 Liane Houghtalin, M.A. (Bryn Mawr College), *Warden of Pembroke West*
 James Jonas, B.A. (University of Iowa), *Warden of Erdman*
 Juliet K. El. Najdawi, M.A. (University of Jordan), *Warden of Rhoads*
 Sheila McManus, M.A. (Bryn Mawr College), *Warden of the Glenmede Residence Center*
 Patricia de Nasi, M.A. (Bryn Mawr College), *Warden of Spanish House in Haffner Hall*
 Florence Perronin, License (Sorbonne Nouvelle), *Warden of French House in Haffner Hall*
 Priscilla A. Van Buskirk, A.B. (Vassar College), *Warden of Rockefeller Manuala Veitengruber, Intermediate Exam (University of Munich), Warden of German House in Haffner Hall*

Child Study Institute

- Janet L. Hoopes, Ph.D. (Bryn Mawr College), *Director*
 Beatrice Schneider, M.S.S. (Bryn Mawr College), *Assistant to the Director*
 Beverly Alexandre, M.S.S. (Bryn Mawr College), *Counselor*
 Shirley Alrich, M.A. (Bryn Mawr College), *Counselor*
 Jean Astley, B.A. (University of Pennsylvania), *Reading Specialist*
 Arlene Baggaley, M.A. (Bryn Mawr College), *Part-time Counselor*
 Eleanor Beatty, M.A. (George Washington University), *Psychologist*
 Hannah Beiter, M.S. (University of Pennsylvania), *Reading Specialist*
 Sally Brodie, M.S. (Temple University), *Reading Specialist*
 Charlotte Diamond, M.S.S. (Smith College), *Counselor*
 Marjorie Edwards, M.S.S. (Bryn Mawr College), *Chief Counselor*
 David M. Ellis, M.D. (Temple University School of Medicine), *Consulting Psychiatrist*
 Kathleen Finnegan, M.A. (Temple University), *Psychologist*
 Rachel Goldberg, Ph.D. (Bryn Mawr College), *Counselor*
 Joel Goldstein, M.D. (Thomas Jefferson University Medical School), *Consulting Psychiatrist*
 Katherine Gordon-Clark, M.A. (Bryn Mawr College), *Psychologist*
 Anita Grinnell, M.S. (University of Pennsylvania), *Psychologist*
 Barbara Grinnell, Ph.D. (Bryn Mawr College), *Counselor*
 Ann Hamm, M.S.S. (Bryn Mawr College), *Social Caseworker*
 Gloria Harad, M.Ed. (Temple University), *Reading Specialist*
 Ann Hartzell, A.B. (Mount Holyoke College), *Reading Specialist*
 Winifred S. Hope, M.Ed. (Boston University), *Reading Specialist*
 Bernard Kanter, M.D. (Dalhousie University), *Consulting Psychiatrist*

BRYN MAWR COLLEGE

Luella M. Kennedy, M.S.S. (Bryn Mawr College), *Part-time Social Case-worker*

Frederic J. Kwapien, M.D. (Tufts University School of Medicine), *Consulting Psychiatrist*

Barbara J. Lorry, M.S. (University of Pennsylvania), *Reading Specialist*

Ann S. McIlvain, M.Ed. (Boston University), *Reading Specialist*

Eunice R. Packer, M.S. (University of Pennsylvania), *Reading Specialist*

Frances Rauch, M.S. (University of Pennsylvania), *Reading Specialist*

Suzanne Ross, M.S. (University of Pennsylvania), *Reading Specialist*

Steven Shelly, Ph.D. (Bryn Mawr College), *Counselor*

Janet Simmons, M.Ed. (Temple University), *Reading Specialist*

Russell Sullivan, M.A. (Seton Hall University), *Counseling Psychologist*

Judith Vaden, M.S.S. (Bryn Mawr College), *Counselor*

Ann Van Arkel, M.S. (University of Pennsylvania), *Reading Specialist*

Isabel Westfried, Ph.D. (Bryn Mawr College), *Chief Psychologist*

Phebe Anna Thorne School

Susan E. Maxfield, M.S. (Syracuse University), *Director*

Sandra P. Juliani, M.Ed. (Tufts University), *Teacher*

Tess L. Schutte, M.A. (Bryn Mawr College), *Teacher*

Usha Balamore (Church Park Training College, Madras University),
Assistant Teacher

Introduction

Bryn Mawr effectively combines a small undergraduate college with two graduate schools. In both the Graduate School of Arts and Sciences and the Undergraduate College the study of the liberal arts and sciences is pursued with members of the faculty who normally teach on both levels. They find that the teaching of undergraduates and the direction of graduate student research complement each other, so that the stimulation of investigation in the various fields of graduate study is reflected in all departments of undergraduate work. The undergraduate program emphasizes both depth and breadth of knowledge and understanding. No field is so broad that it cannot take advantage of the specialist's deep understanding; no specialty is so narrow that it may not profit from a breadth of perception.

Bryn Mawr College is convinced that intellectual discipline and enrichment provide a sound foundation for living. It believes in the rights of the individual and thinks of the college community as a proving ground for the freedom of individuals to think and act as intelligent and responsible members of a democratic society.

In these beliefs Bryn Mawr has preserved the purpose and much of the tradition of its founders, a group of men and women belonging to the Society of Friends who were convinced that intelligent women deserve an education as rigorous and stimulating as that offered to men.

History of the College

This concern about the opportunity for women to study at the university level was felt strongly by Dr. Joseph Taylor, a New Jersey physician who decided to give his estate to provide the land, the first buildings and the endowment for the new college. With much care Dr. Taylor chose the site, thirty-nine acres of land on a hill in Bryn Mawr, eleven miles west of Philadelphia. He supervised the erection of the first building and took part in formulating the plans that led to a new educational venture. This was the opening in 1885 of the first college for women with undergraduate instruction for the A.B. and graduate instruction for the M.A. and Ph.D. degrees in all departments.

As he planned the College Dr. Taylor thought first of the education of young Friends. As Dr. Taylor's trustees in the early years considered the policies of the College they found themselves bound to allow freedom of conscience to all students. By 1893 it is clear from their studies and reports that they were determined to maintain a non-denominational college while strongly supporting the Friends' position of freedom of conscience and providing for continued opportunity within the College and through the College to encourage the student to develop and strengthen her own religious faith.

The first president of Bryn Mawr College was James E. Rhoads, a physician and one of the trustees responsible for the initial plans. The first dean was M. Carey Thomas, who devoted her life to securing for women the opportunity for higher education and the right to share in all the privileges and responsibilities of American citizenship. Miss Thomas succeeded to the presidency in 1894, after the resignation of Dr. Rhoads. In 1922 she was followed by Marion Edwards Park, already distinguished in the academic world for her scholarship in the classics and her ability as a teacher and administrator. From 1942 to 1970 Katharine Elizabeth McBride presided over the College in a time of great change and tremendous growth. During the presidency of Harris L. Wofford, 1970-78, Bryn Mawr strengthened its commitment to increased academic cooperation with Haverford College and to international education. The sixth president, Mary Patterson McPherson, was appointed in 1978.

Since the early years of Bryn Mawr, the campus has grown from 39 to about 112 acres; new buildings have been added as required by additional students and by new undertakings in teaching and research.

The College as Community

Believing that a small college provides the most favorable opportunity for the students to participate in their own education, Bryn Mawr limits the number of undergraduates. And since diversity in background and training serves not only to stimulate discussion but also to develop an intelligent understanding of such diversity, the undergraduate enrollment includes students from various types of schools, independent and public, foreign as well as American. The whole group, both graduate and undergraduate, is composed of students from all parts of the United States as well as from many foreign countries.

The resources of Bryn Mawr as a small residential college are augmented by its participation at the undergraduate level with Haverford College, Swarthmore College, and the University of Pennsylvania in an arrangement which coordinates the facilities of the four institutions while preserving the individual qualities and autonomy of each. Students may take courses at the other colleges, with credit and without additional fees.

The cooperative relationship between Bryn Mawr and Haverford is particularly close since the colleges are only about a mile apart. During 1976-77 a two-college committee comprised of members of the faculties, administrations and student bodies of Bryn Mawr and Haverford was charged with recommending to the faculties and Boards of the two colleges a new proposal for increased two-college cooperation. The two faculties voted to accept the committee's report and as a consequence students may take full advantage of the major offerings at both institutions. Departments met during 1977-78 to develop cooperative academic plans. The objective of the new cooperative arrangement is to strengthen the academic programs offered at both colleges so as to provide greater diversity of the

intellectual pursuits while also maintaining the distinctiveness and enhancing the excellence of each college.

The cooperation between Bryn Mawr and Haverford naturally extends beyond the classroom. Collections in the two libraries are cross-listed, and students may study in either library. Student organizations on the two campuses work closely together in matters concerned with student government and in the whole range of activities. Cooperation in living arrangements was initiated in 1969-70, and several residence halls on the two campuses are assigned to students of both colleges.

Bryn Mawr itself sponsors a broad cultural program which supplements the curriculum and enriches its community life. Various lectureships bring scholars and other leaders in world affairs to the campus not only for public lectures but also for classes and conferences with the students. Such opportunities are provided by the Mary Flexner Lectures in the humanities and by the Anna Howard Shaw Lectures in the social sciences, the visiting professors on the Katharine E. McBride Fund for faculty appointments, and by various individual lecturers in many of the departments of the College. The musical, dramatic and dance programs of the College are under the direction of the faculty and staff of Bryn Mawr and Haverford colleges and are arranged by the appropriate student organizations of the two colleges. The Arnecliffe Studio has facilities for painting and sculpture, where guidance and criticism are provided by the artist-in-residence. There is a dance studio in Pembroke Hall.

Student organizations have complete responsibility for the many aspects of student activity, and student representatives join with members of the faculty and administration in making and carrying out plans for the college community as a whole. The Student Self-Government Association, to which every student belongs, provides a framework in which individuals and smaller groups function. The Association both legislates and mediates in matters of social and personal conduct. Through their Government Association, the students share with the faculty the responsibility for the administration of the Academic Honor System. One of the most active branches of the Self-Government Association is the Student Curriculum Committee, which with the Faculty Curriculum Committee originally worked out the College's system of self-scheduled examinations. The joint Student-Faculty Committee meets regularly to discuss curricular issues and to approve new courses and programs. The Self-Government Association also coordinates the activities of many special interest clubs, open to all students; it serves as the liaison between students and College officers, faculty and alumnae.

The Bryn Mawr-Haverford Arts Council, independently or with other groups (College Theater, Orchestra, Chorus, Little Theater) sponsors work and performances or exhibitions in the arts. Under the aegis of the Athletic Association, the Dance Club choreographs its own productions. The Athletic Association also provides opportunities for all kinds of activities, from the Outing Club to organized intramural and varsity contests.

The News, published weekly, welcomes the participation of students interested in reporting and editing.

Students participate actively on many of the most important academic and administrative committees of the College. In addition to the Curriculum Committee, undergraduates elect three rising seniors to serve with members of the faculty on the College Admissions Committee. Along with alumnae and faculty three students participate in the policy discussions of the Undergraduate Scholarship Committee. Two undergraduates meet with the Board of Trustees, present regular reports to the full Board, and work with the Board's committees. Two undergraduates are also elected to attend meetings of the faculty. At the meetings of both the Board and the Faculty, student members may join in discussion but do not vote.

The International Students Association, representing more than 140 undergraduate and graduate students at the College from more than 50 different countries, enriches the life of Bryn Mawr through social and cultural events.

Black students' organizations have been active in arranging with members of the faculty and staff for new courses in the appropriate departments and in opening, in 1970-71, a Black Cultural Center which sponsors cultural programs open to the College community and provides residence space for a few students.

An active Women's Alliance has been working for several years with various departments and with the Curriculum Committee on the establishment of appropriate courses on women. In 1977-78 the Alliance sponsored a lecture series, and in the fall of 1978 ran a very successful conference on Women's Studies.

Many students who wish to volunteer their services outside the college join Kids Connection, a tutoring service for inner-city children developed and run by Bryn Mawr students.

Through their interest and participation in these many aspects of the College community the students exemplify the concern of Bryn Mawr's founders for intellectual development in a context of social commitment.

Admission

Bryn Mawr College is interested in candidates of character and ability who want a liberal arts education and are prepared for college work by a sound education in school. The College has found highly successful candidates among students of varied interests and talents from a wide range of schools and regions in the United States and abroad.

In its consideration of candidates the College looks for evidence of ability in the student's high school record, her rank in class and her College Board tests, and asks her high school adviser and several teachers for an estimate of her character, maturity and readiness for college.

Program of Secondary School Studies

Candidates are expected to complete a four-year secondary school course. The program of studies providing the best background for college work includes English, languages and mathematics carried through most of the school years and, in addition, history and a laboratory science. A school program giving good preparation for study at Bryn Mawr would be as follows: English grammar, composition and literature throughout four years; at least three years of mathematics, with emphasis on basic algebraic, geometric and trigonometric concepts and deductive reasoning; four years of one modern or ancient language, or a good foundation in two languages; some work in history and at least one course in laboratory science, preferably biology, chemistry or physics. Elective subjects might be offered in, for example, history of art, history of music or biblical studies to make up the total of 16 or more credits recommended for admission to the College.

Since school curricula vary widely, the College is fully aware that many applicants for admission will offer programs that differ from the one described above. The College is glad to consider such applications provided students have maintained good records and continuity in the study of basic subjects.

Application for Admission

Application to the freshman class may be made through one of three plans: *Regular Admission*, *Fall Early Decision*, or *Winter Early Decision*. Applicants follow the same procedures, submit the same supporting materials, and are evaluated by the same criteria under each plan.

The *Regular Admission* plan is designed for those candidates who wish to keep open several different options for their undergraduate education throughout the admissions process. Applications under this plan will be accepted anytime before the February 1 deadline.

The two *Early Decision* plans are designed for candidates who have thoroughly and thoughtfully investigated Bryn Mawr and other colleges

and found Bryn Mawr to be an unequivocal first choice. The Winter Early Decision plan differs from the Fall Early Decision plan only in recognizing that some candidates may arrive at a final choice of college later than others. Early Decision candidates under either plan may file regular applications at other colleges with the understanding that these applications will be withdrawn upon admission to Bryn Mawr; however, one benefit of the Early Decision plans is the reduction of cost, effort and anxiety inherent in multiple application procedures. Early Decision candidates who are applying for financial aid will receive a financial aid decision at the same time as the decision about admission. Any early decision candidate who is not admitted through either the Fall or Winter plans and whose application is deferred to the Regular Admission plan will be reconsidered without prejudice along with the regular admission candidates in the Spring.

Timetables for the three plans are:

Fall Early Decision

Closing date for applications and all supporting materials	November 15
Notification of candidates	by December 15

Winter Early Decision

Closing date for applications and all supporting materials	January 1
Notification of candidates	by January 31

Regular Admission

Closing date for applications and all supporting materials	February 1
Notification of candidates	by mid-April

Application forms may be obtained from the Director of Admissions, Bryn Mawr College, Bryn Mawr, Pennsylvania 19010. A fee of \$25 must accompany each application and is not refundable.

Entrance Tests

The Scholastic Aptitude Test and three Achievement Tests of the College Entrance Examination Board are required of all candidates and should be taken as early as possible. If possible, Achievement Tests should be taken in current subjects. Students should offer three of the one-hour tests: one in English composition and two others. The College recommends but does not require that one of the three tests be taken in a foreign lan-

guage, since a score of 650 or above satisfies an A.B. degree requirement (see page 49-50 for details on language exemption). No special preparation, other than work well done in a good school, is required for successful performance on these tests.

Candidates are responsible for registering with the College Entrance Examination Board for the tests. Information about the tests, test centers, fees and dates may be obtained by writing to College Board, P.O. Box 592, Princeton, New Jersey 08540.

Interviews

All candidates are expected to have an interview either at the College or with an alumna area representative. Appointments for interviews and campus tours should be made in advance by writing or telephoning the Office of Admissions (215-645-5152). The Office of Admissions is open from nine to five on weekdays and from September to February on Saturdays from nine to one. A student who is unable to visit the College should write to the Director of Admissions for the name and address of an alumna representative in her area.

Early Admission

Each year a few outstanding students enter the College after the junior year of high school. Students who wish to apply for Early Admission should plan to complete a senior English course before entrance to college and should write to the Director of Admissions about application procedures.

Deferred Entrance

A student admitted to the College may defer entrance to the freshman class for one year provided that she writes to the Director of Admissions requesting deferred entrance by May 1, the Candidate's Reply Date.

Advanced Placement and Credit

Students who have carried advanced work in school and who have honor grades (4 and 5) on the Advanced Placement Tests of the College Board may, after consultation with the Dean and the departments concerned, be admitted to one or more advanced courses in the freshman year. Bryn Mawr accepts Advanced Placement Tests with honor grades in the relevant subjects as exempting the student from college requirements for the A.B. degree. With the approval of the Dean and the departments concerned, one or more Advanced Placement Tests with honor grades may be presented for credit. Students who enter with three or more Advanced Placement Tests passed with honor grades may apply for sophomore standing. The Advanced Placement Tests are given at College Board centers in May.

Students who present the full International Baccalaureate normally receive one year's credit; those who present a partial IB may receive subject credit for excellent work on the higher level examinations. Up to a year's credit is often given for the French Baccalaureate, the German Abitur, and for similar degrees, depending upon the quality of the examination results. Students may also consult the Dean or the Director of Admissions about the advisability of taking placement tests given by the College during Freshman Week.

Admission to Joint A.B.—M.D. Program of Bryn Mawr College and the Medical College of Pennsylvania

Under the agreement between the College and the Medical College of Pennsylvania negotiated in the spring of 1980, residents of Pennsylvania who are applying for admission to Bryn Mawr's freshman class may request consideration also at the Medical College of Pennsylvania. Each year approximately three students will receive joint admission to candidacy for the A.B. and M.D. degrees. Medical school admissions tendered during the pre-college year will be contingent upon the successful fulfillment of both academic and personal requirements of the Medical College.

Transfer Students

Each year a few students are admitted on transfer to the sophomore and junior classes. Successful transfer candidates have done excellent work at other colleges and universities and present strong high school records which compare favorably with those of entering Bryn Mawr freshmen. Students who have failed to meet the prescribed standards of academic work or who have been put on probation, suspended or excluded from other colleges and universities, will under no circumstances be admitted.

Transfer candidates should file applications as early as possible and by March 15 for entrance in September, or by November 1 for the second semester of the year of entrance. Application forms and instructions may be requested from the Director of Admissions.

Transfer candidates will be asked to submit official test reports from the College Board of the Scholastic Aptitude and Achievement Tests taken in high school. Those who have not previously taken these tests will be required to take only the Scholastic Aptitude Test. Test registration information may be obtained from the College Board, Box 592, Princeton, New Jersey 08540.

To qualify for the A.B. degree transfer students must have completed a minimum of two years of full-time study at Bryn Mawr. Transfer credits will be evaluated at entrance; credit toward the Bryn Mawr degree will be awarded after the student has successfully completed a year's work at the College.

Candidates for transfer will be notified of the action taken on their applications by early June or, for the second semester, in December.

Foreign Students

Bryn Mawr welcomes applications from foreign citizens who have outstanding secondary school records and who meet university entrance requirements in their native countries.

Application forms and instructions are available from the Director of Admissions. Foreign applications should be filed early in the year preceding entrance and must be complete by February 15. No application fee is required.

Foreign applicants will be asked to take the Scholastic Aptitude Test of the College Board. Achievement Tests are recommended but not required. Test registration information may be obtained from the College Board, Box 592, Princeton, New Jersey 08540. Registration arrangements for students taking the tests abroad should be made at least two months prior to the scheduled testing date.

All foreign applicants whose native language is not English will be required to present credentials attesting to their proficiency in English. The Test of English as a Foreign Language (TOEFL) is required for all non-native speakers of English unless they have a diploma from an institution in which English is the sole medium of instruction. TOEFL registration information can be obtained by writing to the Educational Testing Service, Princeton, New Jersey 08540.

Five-Year Master of Arts

Bryn Mawr students who are exceptionally qualified, while undergraduates, may undertake graduate work leading to the degree of Master of Arts. If no departmental program exists, such students should file individual plans of study in advance for approval by the department chairman, the Dean of the Undergraduate College, the Undergraduate Curriculum Committee, the Dean of the Graduate School of Arts and Sciences, and the Graduate Council. Students must arrange to fulfill all the requirements for the A.B. degree and for the degree of Master of Arts. No unit of academic work may be offered for credit toward both degrees.

Admission to Special Academic Programs

The Office of Special Academic Programs was initiated in 1979 to coordinate the activities of non-traditional students in the undergraduate and graduate colleges. There are now five major programs. Information, application forms and instructions for applying to these programs may be requested from the Coordinator of Special Programs.

Special Students

Highly qualified men and women who do not wish to undertake a full college program leading to a degree may apply for admission as special students to take courses on a fee basis prorated according to the tuition of

the Undergraduate College, space and resources permitting and subject to the approval of the Committee on Admissions and the department concerned.

Post-Baccalaureate Students in Premedical and Allied Health Fields

Men and women who hold an A.B. degree and need additional undergraduate training before making initial application to medical schools or graduate programs in allied health fields may apply as post-baccalaureate students. Applications are considered only for the fall semester. All forms and supporting credentials should be submitted as early as possible as applications are considered as they are received and decisions are made on a rolling admissions basis. For details of the program, write to the Associate Dean for Special Academic Programs, Bryn Mawr College, Bryn Mawr, Pennsylvania 19010.

Josiah Macy, Jr. Scholars

Each year for three years beginning in the fall of 1979, 1980, and 1981, Bryn Mawr College will admit into the Macy Scholar Program several promising American black students who wish to prepare themselves for entrance to medical school or schools of allied health professions. This program is partially funded by the Josiah Macy, Jr. Foundation for the purpose of increasing the number of black students studying medicine and in related health fields.

The course of study may include advanced work in biology, chemistry, physics or mathematics. Further, candidates who wish to prepare for MCAT's by retaking a basic science course may do so with the permission of the Director.

Each Macy Scholar Grant covers full tuition, room, board and fees, and a sum for books and personal expenses is given. Before entering the program, all requirements for the A.B. degree should be completed.

Summer Courses

Beginning in the Summer of 1980 a few selected courses from Bryn Mawr's regular curriculum will be offered during an intensive ten-week summer session. Each course will receive full academic credit (8 semester hours for the full session).

Alumnae/i College

Bryn Mawr alumnae/i who have received one or more degrees from Bryn Mawr College (A.B., M.A., M.S.S., M.L.S.P., Ph.D.) are entitled to take up to two units of work in the Undergraduate College (four semester courses or the equivalent) at one-half the normal tuition, subject to the following provisions:

1. Admission to all courses must follow approved admissions procedures.
2. Specific courses are open on a space-available basis.

Withdrawal and Readmission

A student who has withdrawn from College is not automatically readmitted. She must request readmission and should consult her dean and the Director of Admissions concerning the procedure to be followed. Evidence of the student's ability to resume work at Bryn Mawr may be requested in the form of records from another university or medical approval. Applications for readmission will be reviewed twice during the year, in late February and in June. Students who file an application by February 1 will be notified of the Committee's decision in early March, and may then enter the room draw by proxy. Those who file by June 1 will be notified late in June.

Fees See current fee schedule Appendix A.

Financial Aid and Scholarships

All students are, strictly speaking, on financial aid in the sense that their tuition fees cover only part of the costs of instruction. To those students well qualified for education in liberal arts and sciences but unable to meet the college fees, Bryn Mawr is able to offer further financial aid. Alumnae and friends of the College have built up endowment for scholarships; annual gifts from alumnae and alumnae clubs and from industrial and professional groups add to the amounts available each year. It is now possible to provide at least partial aid for approximately forty percent of the undergraduate students in the College. The value of the scholarships ranges widely, but the average grant in 1979-80 was approximately \$3600.

Initial requests for financial aid are reviewed by the Scholarship Committee and judged on the basis of the student's academic promise and achievement in secondary school, and on her financial situation and that of her family. Financial aid awarded at entrance is renewable throughout the student's four years at the College, assuming satisfactory progress towards the degree and continued financial need. Application for renewal must be made annually. Bryn Mawr College, as a member of the College Scholarship Service of the College Entrance Examination Board, subscribes to the principle that the amount of aid granted a student should be based upon financial need. The College does not have financial aid funds which are awarded solely on the basis of academic achievement. The Service assists colleges and other agencies in determining the student's need for financial assistance. All applicants must submit the Financial Aid Form (FAF) in support of application for financial aid. When the total amount of aid needed has been determined, awards are made in the form of grants, loans, and jobs.

Bryn Mawr College administers two kinds of loan programs. The first consists of funds established through the generosity of alumnae and friends of the College, and the second is based on government funds made

available through the National Direct Student Loan program. Full descriptions can be found on page 195.

Another federally funded program, the College Work-Study program, enables the College to expand job opportunities for qualified students with on- and off-campus jobs, summer and winter, with eligible employers, either locally or near the student's home.

Applications for Financial Aid at Entrance

Application forms for financial aid are included in application materials sent to applicants who have submitted the preliminary application for admission. Each candidate for aid must also file with the College Scholarship Service the Financial Aid Form. These forms must be filed with the College and with the College Scholarship Service *no later than January 15* of the student's final year in high school in the case of regular applicants, and *no later than November 1* in the case of applicants under the Early Decision Plan. Applications for financial aid for transfer students are due *no later than March 1*.

As the cost of tuition continues to increase, the number of applicants requiring financial assistance also increases. The funds available for award, however, are not growing at the same rate and the competition for financial aid funds therefore increases. Each year the College is in the position of admitting some academically qualified applicants who need financial assistance but to whom no aid can be granted.

Since scholarship funds of the College are not sufficient to cover the needs of the many well-qualified applicants, students are urged to consult with their school counselors about national and local scholarships which may be available and to submit appropriate applications. Specific questions regarding aid at Bryn Mawr should be directed to the Financial Aid Officer.

For a list of named scholarships and prizes, consult page 175.

Renewal of Undergraduate Financial Aid

Application for the renewal of financial aid must be made annually. The renewal of the award depends on the student's maintaining satisfactory progress towards the degree and on her continued need for assistance. Adjustments are made each year to reflect the changes in the financial situation of the family. Marriage or reaching the age of 21, however, are not considered valid reasons for the withdrawal of parental support or for an increase in financial aid.

A limited amount of funding is available to financial aid recipients for Junior Year Abroad. (See page 54)

The necessary forms for renewal may be obtained in the Financial Aid Office and should be filed with the College Scholarship Service *no later than February 15*.

For a list of scholarships funds and prizes see page 175; for a list of loan funds see page 193.

Academic and Residential Facilities

Libraries

The Mariam Coffin Canaday Library was officially opened in April 1970. As the center of the College's library system, it offers expanded facilities for study and research. The collections for the humanities and social sciences are largely in the Canaday Library, except for art and archaeology in the M. Carey Thomas Library and psychology in Dalton Hall. In addition, there are libraries for the sciences and mathematics in the Science Center. The collections of the Haverford College Library, which complement and augment those of Bryn Mawr, are equally accessible to the students.

Bryn Mawr's libraries operate on the open-stack system, allowing students free access to the collections, which comprise over 550,000 volumes. A Union Catalogue for all the libraries of Bryn Mawr and Haverford is located in the Canaday Library, as are the basic reference and other service facilities of the system. Students are urged to familiarize themselves with the various aids provided for study and research. A series of pamphlets on library use is available for handy reference, and the staff of librarians may be consulted for further assistance.

The John D. Gordan Reference Center provides a focus for reference books and services in the Library. In its card catalog, the main entry cards of the Haverford College Library join those of the Bryn Mawr Library, thus bringing more than 960,000 entries into one file. The Library is a member of the Pennsylvania Area Library Network/Union Library Catalogue of Pennsylvania (PALINET/ULC), which locates approximately 7,200,000 volumes in the Philadelphia area and throughout the state, including the libraries of the American Philosophical Society, the Library Company of Philadelphia, the Historical Society of Pennsylvania, the Academy of Natural Sciences, the Free Library of Philadelphia, the Franklin Institute, the College of Physicians, the Rosenbach Foundation, the University of Pennsylvania, and Temple University. In addition, through the PALINET component of the PALINET/ULC, the Library has access to the OCLC data bank of over 6,500,000 titles cataloged for academic and other libraries throughout the United States. The Library also began dial-access bibliographic research services in 1979.

In addition to the books, periodicals and microfilms basic to a college library, the Canaday Library offers students a small but distinguished collection of research materials among its rare books and manuscripts. The Marjorie Walter Goodhart Medieval Library, for example, provides the basic texts for probing the mind of the late Middle Ages and the thought of the emerging Renaissance. These treasures are supplemented by a growing collection of sixteenth-century texts. Another noteworthy resource is the Louise Bulkley Dillingham Collection of Spanish-American books, which

range from sixteenth-century exploration and settlement to contemporary Spanish-American life and culture.

The Rare Book Room houses the Marjorie Walter Goodhart Medieval Library of incunabula and medieval manuscripts. Important and extensive collections of early material on Latin America, Africa and Asia are to be found in the Dillingham, McBride and Plass collections. The Castle and Adelman collections expand the opportunities for the study of the graphic arts in books. In addition to these special collections are numerous other rare books and manuscripts.

The M. Carey Thomas Library still houses in the West Wing the books and other study materials of the departments of Classical and Near Eastern Archaeology and History of Art. The study area in the stacks has been increased and the collections of slides and photographs have been made more accessible. Also in the West Wing is the Quita Woodward Memorial Room for recreational reading, with recent books on literature, art, religion and current affairs as well as many classics. The Record Club's collection is also housed and serviced there. The rest of the M. Carey Thomas Library provides offices for many of the faculty in the humanities and social sciences as well as the Great Hall, serving now as a Commons for the College community.

Haverford and Swarthmore Colleges and the libraries in Philadelphia are generous in making their resources available to students. The Union Library Catalogue of Philadelphia enables students to locate easily the material in approximately one hundred seventy-five libraries in the Philadelphia metropolitan area.

Students wishing to use another library for material not available at Bryn Mawr must secure from the Head of the Public Services Department of the Library a letter of introduction stating the subject to be consulted.

Archaeology Collections

The Ella Riegel Museum of Classical Archaeology, housed on the third floor of the M. Carey Thomas Library, West Wing, contains a small study collection of Greek and Roman minor arts, especially vases, and a selection of pre-classical antiquities. The Museum was formed from private donations such as the Densmore Curtis Collection presented by Clarissa Dryden, the Elisabeth Washburn King Collection of classical Greek coins, and the Aline Abaecherli Boyce Collection of Roman Republican silver coins. The late Professor Hetty Goldman gave the Ella Riegel Museum an extensive series of pottery samples from the excavations at Tarsus in Cilicia. The collections are used for small research projects by undergraduate and graduate students.

Anthropology Museum and Laboratory

The Anthropology Laboratory in Dalton Hall houses several large collections of New World artifacts, including the W. S. Vaux Collection of

archaeological and ethnological materials. This important collection, made during the last half of the nineteenth century, has as its main emphasis the artistic works of New World Indians. The Anne and George Vaux Collection represents a wide selection of American Indian basketry from the Southwest, California and the Pacific Northwest. The extensive Ward Canaday Collection contains outstanding examples of most of the ceramic and textile traditions for which Peru is known. Other comprehensive collections, given by faculty and friends of the College, represent the Old World Paleolithic and Neolithic, Paleo-Indian, Eastern Woodland, Southwestern, Middle Mississippian and Mexican antiquities. These collections have been enlarged by osteological materials and casts of fossil hominids. There is also a small but growing collection of ethnomusical recordings, representing the music of native peoples in all parts of the world. Students are expected to make use of these materials and laboratory facilities; there are limited display areas available for those interested in working on museum exhibits.

Laboratories

Laboratories, classrooms and libraries for Biology, Chemistry, Geology, Mathematics and Physics are located in the three buildings of the Science Center. Laboratories and classrooms for Psychology are in Dalton Hall.

In the Science Center the central building is the Marion Edwards Park Hall for Chemistry and Geology. Adjoining this building on the north is a building for Biology. South of Park Hall is the building for the physical sciences, which provides additional space for Chemistry and Geology, all the laboratories for Physics, and classrooms and a library for Physics and Mathematics.

In all three buildings of the Science Center and in Dalton Hall there are large laboratories and lecture rooms for undergraduate students and smaller seminar rooms and laboratories for graduate students. In addition to the usual equipment, the science departments have special apparatus and instruments needed in particular research projects by faculty and graduate students and acquired, in part, through the Plan for the Coordination of the Sciences and through research grants from industry and other private sources and from government agencies.

In the Science Center there is an instrument shop with a staff of expert instrument makers to serve all the science departments, and several departments have smaller shops for the use of their own faculty and students. A glassblowing shop is manned by a part-time glassblower. There are rooms specially equipped for work with radioactive materials and for photographic work.

The Geology Department makes available for study and research several important collections. On deposit from the U.S. Geological Survey and the Defense Mapping Agency are 40,000 maps. The Department has

extensive reference and working mineral collections, including the George Vaux, Jr., Collection and the Theodore D. Rand Collection, approximately 10,000 specimens each.

In 1979-80 the College acquired a Hewlett-Packard 3000 computer, featuring 768 kbytes memory and 250 mbytes mass storage, tape drive, card reader and two printers. Interactive computing is supported through fifteen typewriter-like terminals on campus. The languages APL and FORTRAN are available, as well as the packages from IMSL (International Mathematical and Statistical Library), SPSS (Statistical Package for the Social Sciences), BMDP (biomedical statistical package from UCLA), and DYNAMO (Dynamic Modelling language). Bryn Mawr is a member of the UniColl Corporation, a regional computer consortium in Philadelphia which provides the resources and technical support of a major facility, offering access to a pair of IBM 370/168 computers and a library of languages and applications.

Language Laboratory

The modern language departments jointly maintain a Language Laboratory. Its library of tapes contains recordings from the various literatures as well as material especially prepared for language drills. The simple but versatile equipment offers opportunities to improve both the speaking and comprehension proficiency of the student of foreign languages.

Halls of Residence

Halls of residence on campus provide full living accommodations. Denbigh Hall, Merion Hall, Pembroke East, Pembroke West and Radnor Hall are named for counties in Wales, recalling the tradition of the early Welsh settlers of the area in which Bryn Mawr is situated. Rockefeller Hall is named for its donor John D. Rockefeller, and Rhoads North and South for the first president of the College, James E. Rhoads. Erdman Hall, first opened in 1965, was named in honor of Eleanor Donnelley Erdman, Class of 1921 and member of the Board of Directors. The Clarissa Donnelley Haffner Hall, which brings together into a "European village" three houses for students of French, German, Italian and Spanish was opened in the fall of 1970. A Russian House is also provided. Perry House is a Black Cultural Center and residence.

The College offers a variety of living accommodations including a few suites, single and double rooms. The College provides basic furniture, but students supply linen, bed pillows, desk lamps, rugs, mirrors, curtains and any other accessories they may wish.

The maintenance of halls is the responsibility of the Director of Halls and a staff of managers.

Student Life

The Honor Code

The high degree of trust and responsibility which the College has always given to its students is reflected in the Academic and Social Honor Codes. These delegate to the individual students responsibility for integrity in their academic work, and respect for others and discretion in their social behavior. Responsibility for administering the Academic Honor Code is shared with the faculty; an Academic Honor Board, comprised of both students and faculty, mediates in cases of infraction. In the Social Honor Code, as in all aspects of their social lives, the students are entirely self-governing; a Social Honor Board, consisting of ten students, mediates in cases where social conflicts cannot be resolved by the individuals directly involved.

The successful functioning of the Honor Code is a matter of great pride to the Bryn Mawr community, and it contributes significantly to the mutual respect that exists among students and between students and faculty. While the Honor Code makes great demands on the students' maturity and integrity, it also grants them an independence and freedom which they value highly. To cite just one example, many examinations are self-scheduled, so that students may take them at whatever time during the examination period is most convenient for their own schedules and study patterns.

Student Advising

The class deans are responsible for the general welfare of undergraduates, and students are free to call upon them for help and advice on both academic and general matters. In addition to deans, students may consult the Financial Aid Officer, who administers the financial aid program (including grants and loans), and with the Director of Career Planning. The wardens of residence halls, who are members of the Dean's staff, are available for advice and assistance in the residence halls. The College Physician, the consulting psychiatrists and counselors are also available to all students.

For freshmen and transfer students, the Colleges and the Bryn Mawr-Haverford Customs Week Committee provide a period of orientation. Freshmen and transfers come into residence before the College is opened to upperclassmen. The wardens and the committee of upperclassmen welcome them, answer questions, and give advice. New students with their parents may meet at that time with the President. In addition, faculty members are available for consultation, and all incoming students have

individual appointments with the deans to plan their academic programs for the year. Activities sponsored by undergraduate organizations at Bryn Mawr and Haverford Colleges acquaint new students with many other aspects of college life.

Residence

Residence in the college buildings is required of all undergraduates with these exceptions: those who live with their families in Philadelphia or the vicinity, and those who live in houses or apartments of their own choosing after having received permission to do so from the College; in the latter instance, it is the responsibility of students to obtain permission from their parents. A student who plans to be married must inform her dean in advance and must make her own living arrangements off campus.

The College maintains the halls of residence in order to provide simple, comfortable living for its students. It expects students to respect its property and the standards on which the halls are run. A printed statement of residence regulations is given each student. The College makes every effort to keep the residence charge low; the present rates are possible only because the students have agreed to assume the major responsibility for keeping their rooms clean and in order, thus permitting a reduction in service. Failure on the part of a student to meet the requisite standard in the care of her room may cause the College to refuse her residence the following year.

College officers called wardens are in charge of the residence halls. They are single women or married couples who are close to the undergraduates in age and engaged in graduate studies at the College. They are responsible for the general health and well-being of the students in the hall. Wardens also work with the student officers, who are responsible for the functioning of the Social Honor Code within the halls.

All the undergraduate halls are closed during the Christmas and spring vacations, but are kept open during the fall break.

Coeducational Dormitories

Coeducational dormitories on the Bryn Mawr campus were established in 1969-70, housing students from both Bryn Mawr and Haverford. In addition, Haverford College has made available a number of dormitories and suites for Bryn Mawr students. As neither Bryn Mawr nor Haverford allows room retention from one year to the next, the number and kind of coeducational housing units change each year.

Language Houses

Haffner Hall, which opened in the fall of 1970, is comprised of separate units for qualified students of French, Italian, German and

Spanish. Students from Bryn Mawr and Haverford interested in the study of Russian have independent facilities.

Sophomores, juniors or seniors who wish to live in a language house should apply to the head of the appropriate department. Adequate preparation in the language is a prerequisite and those who are accepted agree not to speak English at any time. Residence in a language house provides an excellent opportunity to gain fluency in speaking a foreign language.

Non-Resident Students

For non-resident students, there is a suite of rooms in Erdman Hall containing study space. College mail and campus notices will be sent to mailboxes in Merion Hall throughout the academic year. Non-resident students are liable for all undergraduate fees except those for residence in a hall. Non-resident students are entitled to full use of all out- and in-patient Health Services with a charge for each service rendered.

Insurance

The College is not responsible for loss due to fire, theft or any other cause. Students who wish to insure against these risks should do so individually or through their own family policies.

Health—Medical Services

The College maintains an Infirmary, with in-patient and out-patient services, open during the academic year but closed in the summer. There is twenty-four hour physician and registered nurse coverage. The medical staff may be consulted without charge by students residing in campus housing. Students living off campus pay for health service, as rendered, at a nominal fee. If special consultation or private nursing care is necessary, the student must meet the expense. The College reserves the right to require a student to withdraw, for reasons of health, upon the recommendation of the College Physician.

A Counseling Service is available to all students. Consultation with a psychological social worker or psychiatrist can be arranged by appointment through the Infirmary secretary. Counselors can be reached through the Infirmary in cases of emergency. A charge, determined on a sliding scale based on ability to pay, is made for visits to the Counseling Service in excess of four. Should long term therapy be necessary, the student is referred for outside private care.

The Infirmary offers use of its rooms for sleeping privileges, without meals or nursing care, for about \$6.00 a night (1980 rate).

Medical Requirements

All entering students must file medical history and evaluation forms with the Infirmary before registration for classes.

Medical Insurance

All undergraduate students are required to carry Health Insurance valid in the United States. For those who need coverage, student policies are offered and should be purchased by September 1.

Student Health Lecture Series

A series of lectures and discussions is presented each year by the College Health Service. Such topics as drug addiction, sexuality, adolescent mental health and basic health care are discussed. All freshmen must attend the program, which is given in the fall.

Leave of Absence

A student whose status at the College is not in question may apply to her dean for a leave of absence. A leave may be requested for one or two semesters and once approved, reinstatement will be granted contingent upon residential space available at the time a student wishes to return to the College. Application must be made in writing by July 1 of the academic year preceding the requested leave (or November 1 for second semester leave). The deans and members of the student's major department will review any questions raised by the student or her dean regarding the approval of leave. In case of study at another institution, either foreign or domestic, the transfer of credits will be treated in the usual manner by the Transfer Credit Committee. A student should confirm her date of return, by letter to her dean, by March 1 preceding return for the fall semester and by December 1 for return in the spring semester.

A student extending her leave beyond the approved period must apply for readmission.

Medical Leave of Absence

A student may, on the recommendation of the College Physician or her own doctor, at any time request a medical leave of absence for reasons of health (see Appendix A). Permission to return will be granted upon evidence of recovery.

Family Educational Rights and Privacy Act of 1974

The Family Educational Rights and Privacy Act of 1974 was designed to protect the privacy of education records, to establish the right of students to inspect and review their education records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students have the right to file complaints with

The Family Educational Rights and Privacy Act Office (FERPA), Department of Education, 5411 Switzer Bldg., 330 C Street, SW, Washington, D.C. 20201, concerning alleged failures by the institution to comply with the Act.

Copies of Bryn Mawr's policy regarding the Act and procedures used by the College to comply with the Act can be found in the Office of the Undergraduate Dean. The policy is printed in the Bryn Mawr-Haverford Academic Regulations, which also lists all education records maintained on students by this institution.

Questions concerning the Family Rights and Privacy Act may be referred to the Office of the Undergraduate Dean.

Designation of Directory Information

Bryn Mawr College hereby designates the following categories of student information as public or "Directory Information." Such information may be disclosed by the institution for any purpose, at its discretion.

- Category I Name, address, dates of attendance, class
- Category II Previous institution(s) attended, major field of study, awards, honors, degree(s) conferred
- Category III Date of birth
- Category IV Telephone number
- Category V Marital status

Currently enrolled students may withhold disclosure of any category of information under the Family Educational Rights and Privacy Act of 1974 by written notification which must be in the Office of the Recorder, Taylor Hall, by 5 p.m. on the last Friday in September. Forms requesting the withholding of "Directory Information" are available in all deans' offices and in the Office of the Recorder.

Bryn Mawr College assumes that failure on the part of any student to specifically request the withholding of categories of "Directory Information" indicates individual approval for disclosure.

Equality of Opportunity

Bryn Mawr College admits students of any race, color, national and ethnic origin as well as the handicapped, to all the rights, privileges, programs and activities generally accorded or made available to students at the College. It does not discriminate on the basis of race, color, or national or ethnic origin, age or handicap in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other College-administered programs or in its employment practices.

To aid the handicapped, regional alumnae/i will provide reading services, orientation sessions and other services to applicants who make the College aware of their physical disabilities.

As required by Title IX of the 1972 Federal Education Amendments,

it is also the policy of Bryn Mawr College not to discriminate on the basis of sex in its educational programs, activities, or employment practices. The admission of women in the Undergraduate College is in conformity with a provision of the Act. Inquiries regarding compliance with Title IX and other policies of non-discrimination may be directed to the Assistant to the President, Taylor Hall, or the Director of the Office for Civil Rights, Department of Education, Washington, D.C.

Child Care

New Gulph Children's Center

Child care is available for Bryn Mawr and Haverford College families on a space-available basis at the New Gulph Children's Center, Conestoga and Sproul Roads, Villanova, just ten minutes from campus. Children 3 months through 6 years old are eligible. The center is open five days a week, 7:30 a.m. - 5:30 p.m.

The center, conducted by a professional staff, incorporates appropriate age group developmental activities with high quality group care, plus nursery school and kindergarten programs. Flexible schedules can be arranged to accommodate the programs of students, staff, faculty and alumnae parents. A minimum of nine hours regular use per week is required.

The fee scale is based on the age of the child and the number of hours in attendance at the center. Tuition for the semester is payable in advance, and financial assistance is available. Early registration for all programs is essential. For more information contact the Director at 688-2411.

Phebe Anna Thorne School

Situated on the Bryn Mawr campus, the Thorne School is a laboratory school run in cooperation with the Graduate Department of Education and Child Development. Young children from nearby communities, aged two to five, are enrolled in creative, pre-kindergarten programs. The School offers half-day sessions Monday through Friday, September-May. For fees and information, write to or telephone the Director, Phebe Anna Thorne School, Bryn Mawr College, Wyndon and Roberts Road, Bryn Mawr, Pennsylvania 19010. (215) 527-5490.

Career Planning

Students and alumnae are invited to make use of the services of the Career Planning Office, which include: a) career and job counseling; b) group and private sessions on resume writing and job-hunting techniques; c) information on and referrals for on- and off-campus part-time jobs and summer and permanent positions; d) scheduling on-campus interviews with business and government recruiters; e) maintaining and furnishing to employers, upon request, credentials files containing biographical data and letters of recommendation.

During the academic year the Office sponsors career conferences to provide students with a broader knowledge of career options. These conferences have focused within recent years on careers for women in law, medicine, the arts, business and management, and computer science.

In cooperation with the Alumnae Association, the office provides students with access to a network of alumnae who make themselves available to students for personal consultation on career-related questions and who in practical ways assist students in determining their career fields. Students interested in exploring specific career fields may participate during the spring vacation in the Extern program, working as "shadow colleagues" with alumnae and other sponsors who are specialists in these fields.

Bryn Mawr participates in the Federal College Work-Study Program established by the Economic Opportunity Act of 1964. This program provides funds for on- and off-campus jobs for students who meet the federal eligibility requirements. Students interested in this program should consult the Director of Financial Aid. (See page 34.)

Geographical Distribution

1979-1980

Undergraduate College

The students are from 49 states, the District of Columbia and Puerto Rico and 38 foreign countries with distribution as follows:

U.S. Residence

1. *New England*

Maine	5
New Hampshire	5
Vermont	11
Massachusetts	63
Rhode Island	2
Connecticut	30
	<hr/>
	116 (10.9%)

3. *East North Central*

Ohio	36
Indiana	7
Illinois	27
Michigan	13
Wisconsin	8
	<hr/>
	91 (8.6%)

2. *Middle Atlantic*

New Jersey	90
New York	192
Pennsylvania	200
	<hr/>
	482 (45.4%)

4. *West North Central*

Minnesota	11
Iowa	6
Missouri	3
North Dakota	2
South Dakota	1
Nebraska	2
Kansas	2
	<hr/>
	27 (2.5%)

5. *South Atlantic*

Delaware	5	
Maryland	52	
Dist. of Columbia	13	
Virginia	25	
West Virginia	1	
North Carolina	10	
South Carolina	3	
Georgia	7	
Florida	11	
Puerto Rico	6	
Virgin Islands	—	
	133	(12.5%)

6. *East South Central*

Kentucky	2	
Tennessee	5	
Alabama	2	
Mississippi	3	
	12	(1.1%)

7. *West South Central*

Arkansas	—	
Louisiana	4	
Oklahoma	2	
Texas	13	
	19	(1.8%)

8. *Mountain*

Montana	2	
Idaho	2	
Wyoming	1	
Colorado	5	
New Mexico	2	
Arizona	8	
Utah	3	
Nevada	2	
	25	(2.4%)

9. *Pacific*

Alaska	1	
Washington	3	
Oregon	8	
California	56	
Hawaii	7	
	75	(7.1%)

Foreign Residence

Argentina	1
Belgium	1
Brazil	3
Canada	10
Egypt	1
France	1
Great Britain	1
Greece	2
Hong Kong	4
India	3
Indonesia	1
Iran	3
Israel	1
Italy	1
Japan	4
Jordan	2
Kenya	1
Korea	1
Lebanon	1
Liberia	1
Malaysia	5
Morocco	1
Nigeria	2
Pakistan	3
Philippines	2
Poland	1
Spain	6
Switzerland	4
Thailand	3
Turkey	7
Uruguay	2
Venezuela	1
West Germany	2

Totals: U.S. Residence 980 (92.3%)
 Foreign Residence 82 (7.7%)

Curriculum

The Bryn Mawr curriculum is designed to encourage breadth of learning and training in the fundamentals of scholarship in the first two years, and mature and sophisticated study in depth in a major program during the last two years. The plan of study looks both backward and forward by taking into account changes in secondary education and the necessary preparations for graduate and professional schools, but its main purpose is to prepare the student for the lifelong pleasure of educating herself. It encourages independence within a rigorous but flexible framework of divisional and major requirements.

The Two-College Cooperative Plan

In May, 1977, the faculties at Bryn Mawr and Haverford Colleges approved a two-college cooperative plan for the curriculum. Virtually all undergraduate courses and all major programs at each college are open to students from both, greatly increasing the range of available subjects. An academic plan of cooperation defines three different kinds of programs.

Non-counterpart Programs: Each College will continue to have some majors and programs that do not exist at the other, and, through joint planning, will seek an equitable balance of such programs. These majors and programs will be open to students of both colleges.

New Federated Programs: New, two-college majors or programs when developed will be staffed with faculty of both colleges. Again, these programs will be open to students of both colleges.

Counterpart Programs: Cooperation at the level of Counterpart Departments aims at strengthening and enriching the major at each college by broadening the range of coverage of the discipline; eliminating unnecessary duplication of effort; and increasing diversity of approach to the subject matter.

In deciding upon a major, whether at Bryn Mawr or Haverford, a student should bear in mind that she must meet the requirements for the A.B. degree from Bryn Mawr as specified below.

Each incoming student is given a copy of the Bryn Mawr-Haverford Academic Regulations which lists rules governing academic work and procedures at Bryn Mawr and at Haverford. All students are responsible for knowing the rules of each college thoroughly.

Cooperation with Swarthmore College and the University of Pennsylvania

Full-time Bryn Mawr students may take courses at Swarthmore College or the University of Pennsylvania during the academic year with-

out payment of additional fees. Bryn Mawr, Haverford, and Swarthmore Colleges operate a bus which runs several times a day to carry students between the campuses. The University of Pennsylvania is easily accessible by train. Information about course offerings and registration procedures at the cooperating institutions is available in the Dean's Office.

Requirements for the Degree at Bryn Mawr

The degree of Bachelor of Arts is conferred upon students who have completed the requirements described below.

Unit Requirement

All candidates for the A.B. degree shall present 16 units¹ of work. In all cases one of these will be a unit of Senior Conference in the major subject.

Divisional Requirement

Students must complete a full unit of work in one subject for each of the four following disciplinary groups (exception: Group III, see footnote 8), with courses at either Bryn Mawr or Haverford Colleges. The Curriculum Committee will consider petitions from individual students for exceptions to the divisional requirements.

<i>Group I</i>	<i>Group II</i> ⁵	<i>Group III</i> ⁸	<i>Group IV</i>
History	Biology	English	History
Philosophy	Chemistry	Literature	Philosophy
Anthropology ²	Geology	Modern	Archaeology
Economics	Physics	Literatures	History of Art
Education	Psychology 101 ⁶	Classical	History of Religion ⁹
Political Science	[Mathematics] ⁷	Literatures	Music ¹⁰
Psychology ³			
Sociology ⁴			

-
1. A unit of work is the equivalent of eight semester hours and is either a year course or, when appropriate, two one-semester courses.
 2. Anthropology 101, if at Bryn Mawr.
 3. Two semester courses chosen from: 206, 207, 208, 305; any Haverford courses numbered 111 and above, with the exception of 112f, 113f, and 240b.
 4. At least one semester of work at the 100-level is required.
 5. A unit of work in laboratory science to meet the *Group II* requirement must include a laboratory that meets a minimum of three hours a week.
 6. Or in special cases Psychology 201a and 302b.
 7. Mathematics may only be used to fill a *group* requirement under the conditions outlined in B below.
 8. For combinations of literature courses to meet the *Group III* divisional requirement, a student must consult her dean.
 9. Or Religion at Haverford.
 10. For music courses which meet the *Group IV* requirement, a student must consult her dean. Courses in music performance do not meet the requirement.

The following directions and qualifications are to be noted:

- A. The requirement in Group II must be met before the start of the senior year.
- B. A student (not majoring in subjects under Group II) may elect a second course under Group II, including Mathematics, as an alternative to any one of her other divisional requirements.
- C. No course may satisfy more than one divisional requirement. A student majoring in History or Philosophy may count courses in her major as satisfying the requirement in either Group I or Group IV, but not both. A student majoring in Psychology may count courses in her major as satisfying either Group I or Group II, but not both. A student majoring in History of Religion may count courses in her major as satisfying either Group III or Group IV, but not both.
- D. English 015 does not meet the divisional requirement in Group III.
- E. Interdepartmental courses will be counted toward a given Divisional Requirement when they are cross-listed under departments included in that division.

English Composition and Foreign Language Requirement

In addition to the divisional requirements, each student must:

- A. Include in her program two semesters of English composition (English 015) unless she has achieved a score of 5 on the Advanced Placement Test. The English department also administers an exemption test.
- B. Achieve a certain level of proficiency in two foreign languages or in one language and Mathematics, the level to be demonstrated in one of the following ways:
 - 1. She may demonstrate a knowledge in each of two foreign languages by
 - a. passing an examination offered by the College every spring and fall, or
 - b. passing with an average grade of at least 2.0 in one full unit at Bryn Mawr above the elementary level, or
 - c. attaining a score of at least 650 (in one language) on a College Board Achievement Test taken in the junior or senior year in high school or by passing with an honor grade an Advanced Placement Test.
 - 2. She may offer one language to be tested as described above and demonstrate proficiency in Mathematics by
 - a. attaining a grade of 4 or 5 on the Advanced Placement Test, or
 - b. passing an examination offered by the Department of Mathematics each spring and fall, or

- c. achieving an average grade of at least 2.0 in Mathematics (one full unit, to include at least one-half unit of calculus).
3. She may offer one language to an advanced level of proficiency to be demonstrated by passing with an average grade of at least 2.0 one full unit at the 300 level.
4. Transfer students will be allowed to meet one of the math/language requirements at another institution.

Major Requirements

At the end of the sophomore year each student must choose a major subject and in consultation with the departmental adviser plan an appropriate sequence of major and allied courses. Usually a major is made up of four units plus one unit of Senior Conference in the major subject and two units of allied work. No student will be required to offer more than six units in the major subjects. Students invited to participate in the Honors program count the Honors project as one of the major subject units.

In brief outline, each student's program will include:

- A. a unit of work in English composition, unless she is exempted
- B. work to demonstrate the required level of proficiency in
one foreign language, or
two foreign languages, or
one foreign language and mathematics
- C. four units of work, one from each of the divisions I-IV
- D. a major subject sequence of 6 units of major and allied work and a Senior Conference
- E. elective units of work to complete an undergraduate program of at least 16 units.

Each major department offers Honors work to a number of its senior students who have demonstrated unusual ability. Honors work is of more advanced character than that done in the regular courses and requires more initiative and power of organization than is usually expected of undergraduate students. Such work may be carried on in connection with an advanced course or may be planned especially for individual students. It usually includes independent work of a critical and analytical nature with source material, periodic reports and the preparation of an Honors paper.

A student with unusual interest or preparation in several areas could consider one of the interdepartmental majors, a double major, a major with a strong minor or a concentration involving work in several departments built around one major as a core. Such programs can be arranged by consulting the Dean and members of the departments concerned.

A student who wishes to pursue independent study of a special area, figure or problem within a given discipline, may, if she finds a faculty member willing and able to supervise such work, substitute it for one semester or year course.

A student who majors at Haverford College must meet the major requirements of Haverford College.

Minor Requirements

Some departments offer a minor in their field. The requirement is three units of work, courses to be determined by the department.

Standards of Work

A. Bryn Mawr uses a numerical grading system consisting of a scale of 4.0 to 0. Each student must attain a grade of 2.0 or above in at least half of her graded courses and a grade of at least 1.0 in the remainder. In all courses in her major subject taken in the junior and senior years (except Senior Conference) she must attain grades of 2.0 or above. Should she receive a grade below 2.0 in such courses, she may be required to change her major.

Each student's work must be of sufficiently high quality to meet the academic standards set by the College. The Council of the Undergraduate College, composed of one faculty member from each department, reviews the records of those students whose work has fallen below the required standard. In such cases the Undergraduate Council may set specific requirements to be met by the student concerned and may also curtail privileges. In some cases the Undergraduate Council may require her to withdraw for a period of time from the College, and in extreme cases may exclude her.

B. The degree of Bachelor of Arts may be awarded *cum laude*, *magna cum laude*, or *summa cum laude*. A student who has completed Honors work in her major subject with a grade of 3.3 and received a grade of at least 3.3 in the Senior Conference is awarded the degree with Honors in that subject.

C. Credit for work taken elsewhere is given as follows:

1. Transfer credits (consult a dean for policy and procedures).
2. Credits from cooperating institutions

Full-time students at Bryn Mawr may register for courses at Haverford College, Swarthmore College and the University of Pennsylvania during the academic year without payment of additional fees. Credit toward the Bryn Mawr degree will be granted for such courses.

3. Summer School Work

A student who wishes to present summer school work for credit should first obtain approval of her plan from her class dean and from the department concerned. No credit will be given for work in which a student has received a grade below 2.0. Credit given will be calculated on an hour-for-hour basis. A total of no more than sixteen semester hours (two units of Bryn Mawr credit) earned in summer school may be

counted toward the degree. Of these, no more than eight semester hours (one Bryn Mawr unit) may be earned in any one summer.

The Academic Honor System

Integrity of all work is demanded of every student. Information about the Academic Honor System dealing with the conduct of examinations, written quizzes and other written work is given to all entering students. Any infraction of these regulations or any action contrary to their spirit constitutes an offense. Infractions are dealt with by the Academic Honor Board, which is composed of faculty and students.

Supplementary Requirements

1. Physical Education. All students must meet the requirement in Physical Education (see page 173).

2. Residence. Every candidate for the degree of Bachelor of Arts will normally attend Bryn Mawr College for a period of four years. She must complete a minimum of eight units of work while enrolled at Bryn Mawr College. Students admitted on transfer from other colleges must complete sixteen units, eight of which must be taken while enrolled as a degree candidate at Bryn Mawr College. For all students, at least four of these units must be completed at Bryn Mawr during the junior or senior year.

3. Full Program of Work. With few exceptions, all students carry a program of four courses and do not spend more than the equivalent of four undergraduate years in completing the work for the A.B. degree.

Attendance at Classes

Regular attendance at classes is expected. Each instructor will make clear specific standards for attendance. Responsibility for attendance rests solely with each student.

Absences for health or other urgent reasons are excused by a dean, but the student should consult her instructors about making up the work. If it seems probable to her dean that a student's work may be seriously handicapped by the length of her absence, she may be required to withdraw from one or more courses.

Exclusion

The College reserves the right to exclude students whose academic standing is unsatisfactory or whose conduct renders them undesirable members of the college community. In such cases fees will not be refunded or remitted in whole or in part; fellowships and scholarships will be cancelled.

Premedical Preparation

Bryn Mawr, through the curriculum in liberal arts and sciences, provides the opportunity to meet requirements for admission to the leading medical schools of the country, and each year a number of its graduates enters these schools. The minimal requirements for most medical schools are met by the following courses: Biology 101, Chemistry 101, Chemistry 202, Mathematics 101, Physics 101. A second course in biology may also be required by some medical schools. Students planning premedical work should consult early in their careers with the Associate Dean for Special Academic Programs. For a list of scholarships to Bryn Mawr graduates for medical study, see page 192.

Post-Baccalaureate Premedical Program

A post-baccalaureate premedical program is available to graduates of Bryn Mawr and other four-year accredited institutions. For further information, consult page 32.

Preparation to Teach

Students majoring in a liberal arts field which is taught in secondary school may, by appropriate planning early in the undergraduate career, prepare themselves to teach in the public junior and senior high schools of Pennsylvania. By reciprocal arrangement the Pennsylvania certificate is accepted by a number of other states. A student who wishes to teach should consult early in her college career with the chairman of the department concerned and of the Department of Education and Child Development so that she may make appropriate curricular plans. (See page 77.)

Preparation for Law and Business Schools

There is no prescribed program of courses required for admission to law or business schools; a student with a strong record in any field can compete successfully for admission. The College appoints pre-law and pre-business advisers to assist students considering careers in law or business. Any student or alumna wanting to consult these advisers should inquire in the Dean's office.

The 3-2 Plan in Engineering and Applied Science

The College has recently negotiated an arrangement with the California Institute of Technology whereby a student interested in engineering and recommended by Bryn Mawr may, after completing three years of work at the College, transfer into the third year of the engineering and applied science option at the Institute to complete two full years of work there. At the end of five years she will be awarded a Bachelor of Arts degree by Bryn Mawr and a Bachelor of Science degree by the California Institute of Technology.

In her three years at Bryn Mawr the student must complete the composition, divisional, and foreign language requirements, as well as a prescribed science program and the basis for a Bryn Mawr major (probably, though not necessarily, in either Mathematics or Physics). Students considering this option should consult the Dean at the time of registration in the freshman year.

Summer Programs in Languages

Institut d'Etudes Françaises d'Avignon

Bryn Mawr College offers a summer program of intensive work in significant aspects of French culture. The program is open to men and women students from other colleges and from Bryn Mawr. Certain of the courses carry graduate credit. The *Institut* director and faculty members are French professors teaching in colleges and universities in the United States and France. Classes are held in the Palais du Roure, and the facilities of the Bibliothèque Calvet are available to the group. Students live with families in Avignon. Applicants for admission must have strong academic records and have completed a course in French at a third-year college level or the equivalent. For detailed information concerning admission, curriculum, fees, academic credit and scholarships, students should consult Dr. Michel Guggenheim of the Department of French.

Centro de Estudios Hispánicos en Madrid

Bryn Mawr also offers a summer program of intensive work held in Madrid. The program, under the direction of a member of the Department of Spanish, is open to men and women students from other colleges and from Bryn Mawr. The instructors are members of college and university staffs familiar with teaching standards and practices in this country.

Courses are offered both for the student whose interest is Spain and for the student who wishes to specialize in Latin American affairs. Students live with Spanish families. All participate in study trips and attend an excellent series of carefully planned lectures and cultural events. Applicants must have strong academic records and must have completed the equivalent of three years of college-level Spanish. For information students should consult Dr. Eleanor Paucker of the Department of Spanish. A small number of scholarships are available each year. The *Centro* was made possible by a grant from the Henry L. and Grace Doherty Charitable Foundation of New York.

The Junior Year Abroad

Qualified students may apply for admission to Junior Year Abroad programs, or develop individual programs for study abroad which have the approval of their major department and the Curriculum Committee. Applicants must have excellent academic records and must give evidence of competence in the language of the country in which they plan to study. In

general, two years of study at the college level are necessary to provide adequate language preparation.

Juniors who study abroad are not only language majors; they often include majors in History of Art, History or the social sciences. In recent years students have studied in Great Britain, France, Spain, Germany, Italy, Switzerland, Greece, the Soviet Union, Israel, Japan, Hong Kong, Canada, Nigeria and Colombia. All students who plan to study abroad should consult the chairmen of their major departments to be certain that their work may be coordinated with the general plan for the major subject.

Intercollegiate Center for Classical Studies in Rome

The Center is maintained by a cooperating group of colleges and universities, of which Bryn Mawr is a member. Students majoring in Latin, Greek or Archaeology who meet the Center's entrance requirements may apply for admission for one or both semesters of the junior year. The Center's curriculum includes courses in Greek and Latin literature, ancient history and archaeology, and provides for the study of Italian.

Guest Senior Year

A student, after consultation with her major department and her dean, may apply for a guest senior year at another institution in the following circumstances: (a) if a program offered elsewhere will provide her with an opportunity for furthering her academic goals in a way not possible at Bryn Mawr (such cases to be submitted to the Curriculum Committee for approval); (b) for reasons of health or family emergency.

Interdepartmental Work

Interdepartmental majors are offered in Classical Languages, Classical Studies, and the Growth and Structure of Cities; an interdepartmental area of concentration in Hispanic and Hispanic-American Studies (see page 166) is also offered. In addition, each year certain courses are offered which cut across well-defined areas of knowledge and emphasize relationships among them. The interdepartmental courses are usually offered at the advanced level since the material considered requires some background in at least two disciplines.

The Bryn Mawr Program in International Economic Relations

The Bryn Mawr Program in International Finance was developed in 1980 with the help of funds from the Exxon Education Foundation and the International Paper Foundation, to help prepare students skilled in language for careers in international business or law. The program combines the study of international finance and economic relations with the study of the language and culture of a specific geographical area, chosen from among the French, German, Russian, and Spanish-speaking regions of the world.

Participants in the program will meet the following requirements:

(1) completion of specific 200-level courses in Economics, as well as 200-level course work in the appropriate language (in special cases, work in language done elsewhere will be accepted);

(2) attendance at a special lecture series at Bryn Mawr;

(3) participation in one of four designated summer programs for the study of advanced language, area studies, and international finance. The summer program will normally be taken following the junior year, but it may be taken at other times if the student has fulfilled requirements (1) and (2).

Students interested in this program should consult the Dean or the Program Director as early as possible in their undergraduate careers.

Women's Studies

Many members of the Bryn Mawr faculty have a strong commitment to feminist scholarship, or to research in sex and gender roles. The College does not have a formal program of Women's Studies but there are many courses, available in a variety of departments, which explore the nature of female roles and traditional attitudes toward women in history, literature, or society. Consult page 171 for a list of such courses.

Courses of Study 1980-82

Key to Course Numbers and Letters

- 001-099 elementary and intermediate courses.
With the exception of Greek 001 and Russian 001 these courses are not part of the major work.
- 100-199 first-year courses.
- 200-299 second-year courses.
- 300-398 advanced courses in the major work; 399 is used for the Senior Conference in the major subject.
- 400-499 special categories of work (e.g., 401 for Honors, 403 for a supervised unit).
- a a half-year course given in the first semester.
- b a half-year course given in the second semester.
- c a half-year course given two hours a week throughout the year.

Courses listed as full-year courses (e.g., without a letter designation such as "a" or "b") must be carried throughout two semesters, unless a student receives permission from both her class dean and the department concerned. One unit of work carried throughout the year is the equivalent of eight semester hours, or twelve quarter hours.

Selected Haverford and Swarthmore College courses are listed in this catalogue when applicable to Bryn Mawr programs. Consult the Haverford and Swarthmore College catalogues for full course descriptions.

Every effort has been made in the following pages to describe the scope of each department's program and the frequency with which courses are offered. For the most up-to-date information on times of offerings and instructors, students should consult the Bryn Mawr-Haverford Course Guide, which is published at the time of pre-registration for the following semester.

Anthropology

Professor: Jane C. Goodale, Ph.D.†

Associate Professors: Philip L. Kilbride, Ph.D., *Chairman*
Judith R. Shapiro, Ph.D.†

Assistant Professor: Richard H. Jordan, Ph.D.

Lecturer: Richard S. Davis, Ph.D.

Visiting Lecturer: Frederica de Laguna (semester II, 1980-81)

Assistants: Jeanette Dickerson, M.A.
Premalata Ghimire, M.A.

Professor of Linguistics in Anthropology and German:
Nancy C. Dorian, Ph.D.

The aim of the department is two-fold: (1) to introduce the liberal arts student to the discipline of anthropology: its aims, methods, theories and contributions to an understanding of the nature of human culture and society and (2) to provide for the major in anthropology, in addition to the above, a firm understanding of the basic concepts and history of the discipline through examination of theoretical works and intensive studies in the ethnography and prehistory of several world areas. Laboratory experience is provided in a number of courses.

Requirements in the Major Subject: 101, 203a or 203b (Haverford), 320a, two additional half-units of work in archaeology/biological anthropology or one-half unit in archaeology/biological anthropology and one in linguistics, one 300-level semester course in the area of ethnography, plus 399a and b (Senior Conference). Two and one-half additional units of major or allied work are required, which may be taken at Bryn Mawr or Haverford, at least one-half unit at the 300-level.

Allied Subjects: Biology, The Growth and Structure of Cities Program, Classical and Near Eastern Archaeology, Economics, English Literature, Geology, History, History of Art, History of Religion, Linguistics, Philosophy, Political Science, Psychology, Sociology and inter-departmental "Culture and Civilization" courses (such as INT. 290 "*La Civilisation française*," INT. 210a "Hispanic Culture and Civilization," and INT. 307b "Introduction to Celtic Civilization").

101. *Introduction to Anthropology:* Members of the Department. Man's place in nature, human evolution and the history of culture to the rise of early civilizations in the Old and New Worlds; forms of culture and society among contemporary peoples. Because the subject matter is exten-

† On leave for the year 1980-81

† On leave semester II, 1980-81

sive and the basic concepts unfamiliar, a full year is needed to gain an adequate understanding of the subject; therefore, both semesters are required for credit.

- 102a. *Afro-American Heritage*: Mr. Kilbride.
&b. Consult semester course lists.
103. *American Indian Heritage*.
104. *Introduction to Peoples and Cultures of the Middle East*.
- 105a. *Sex, Culture and Society*: Miss Shapiro, Miss Goodale.
Introduction to the anthropological study of sexual differentiation.
165. *American Youth Culture*: Miss Whitehead (at Haverford).
Consult semester course list.
- 201a. *Archaeological Methods of Analysis*: Mr. Davis.
This course examines various combinations of technique and theory archaeologists use to transform archaeological data into statements about patterns of prehistoric cultural behavior, adaptation and culture change. The process of theory development, hypothesis formulation, gathering of archaeological data and its interpretation and evaluation is discussed and illustrated by several examples. Major theoretical debates current in American archaeology are reviewed. Also discussed is the place of archaeology in the general field of anthropology. Offered in 1980-81.
- 203a. *Introduction to Social Organization*: Miss Goodale.
Social organization: an introduction to theory and methods and a study of significant contributions. Prerequisite: Anthropology 101. Offered in 1981-82.
- 203b. *Introduction to Social Organization*: Mr. MacGaffey (at Haverford).
An introduction to the distinctive concerns and methods of social anthropology through the study of systems of production, social reproduction and exchange in Africa. Prerequisite: 155a or b, or Bryn Mawr Anthropology 101. May not be taken for credit by students who have completed Bryn Mawr Anthropology 203a. Consult semester course list.
- 204b. *North American Prehistory*: Mr. Jordan.
A study of North American archaeology and culture history. Introduction to methods and theory in archaeology and in the analysis of archaeological data. Laboratory work is included. Prerequisite: Anthropology 101, or permission of instructor.
- 208a. *Old World Prehistory*: Mr. Davis.
Origin and evolution of culture; survey of Paleolithic, Mesolithic and Neolithic cultures of Africa, Europe, Asia and the Pacific. Some attention is given to method and theory in prehistoric archaeology. Laboratory work is included. Prerequisite: Anthropology 101, or permission of instructor. Offered in 1981-82.
- 210a. *Human Evolution*: Mr. Jordan.
Man's position among the primates, processes of bio-cultural evolution: the fossil record and contemporary distributions of varieties of man. Prerequisite: Anthropology 101, or permission of instructor. Offered in 1980-81.

- 218b. *Conflict and Conflict Management: A Cross-Cultural Approach*: Mr. Ross.
(INT.) See Political Science 218b. Offered in 1980-81 and alternate years.
- 255a. *Anthropology of Religion*: Mr. MacGaffey (at Haverford). Offered in 1980-81.
256. *Anthropology of Law*: Mr. MacGaffey (at Haverford). Consult semester course list.
- 258a. *Comparative Ethnography*: Mr. MacGaffey, Miss Whitehead (at Haverford).
- 302b. *Africa: Sub-Saharan Ethnology*: Mr. Kilbride.
A study of selected Sub-Saharan societies and cultures, illustrating problems in ethnography. Prerequisite: Anthropology 203a. Offered in 1980-81.
- 303b. *Oceania: Topics in Melanesian Ethnography*: Miss Goodale.
An intensive study of selected Melanesian cultures and societies with emphasis on such topics as politics, law, economics, sex roles and identities, magic, religion, cultural dynamics and political development. Prerequisite: Anthropology 203a. Offered in 1981-82.
- 305a. *Native Cultures of South America*: Miss Shapiro.
Comparative study of Indian societies of lowland South America, with special focus on the topics of kinship, marriage, sex roles, and ritual; attention will also be given to the current situation of native peoples in South America. Prerequisites: Anthropology 203 or consent of instructor. Offered in 1980-81.
308. *Language in the Social Context*: Miss Dorian.
(INT.) Language in the social context: human versus animal communications, childhood language acquisition; bilingualism; regional dialects; usage and the issue of "correctness"; social dialects; speech behavior in other cultures. Offered in 1980-81.
- 310a. *Introduction to Descriptive Linguistic Techniques*: Miss Dorian.
(INT.) Offered in 1981-82.
- 312b. *Field Methods in Linguistics*: Miss Dorian.
(INT.) Offered in 1981-82.
- 313a. *Linguistic Anthropology*: Miss Shapiro.
Examines language as a social and cultural phenomenon. Consideration will be given to theoretical and methodological relationships between linguistics and socio-cultural anthropology. Prerequisite: Anthropology 101, Interdepartmental 301a, or equivalent preparation in anthropology and linguistics. Consult semester course list.
- 314b. *Comparative Hunters and Gatherers*: Mr. Davis.
An intensive study of Australian Aboriginal peoples, Bushmen of the Kalahari of Southern Africa and other peoples who today subsist primarily by utilizing resources extracted from their environment through hunting and gathering technologies. Major topics to be examined will include: man/land relationships (technological, legal, and religious), independence and interdependence of social groupings, ethno-epistemology, and the theoretical importance of hunters and gatherers to anthropological thought today. Prerequisite: 203a or permission of instructor. Offered in 1980-81.

Cultural Theory: Mr. Davis, Miss Shapiro.

The relationship of anthropology to other social sciences and an examination of the important anthropological contributions to cultural theory. Prerequisite: a half-unit of advanced (300) work.

Psychological Anthropology: Mr. Kilbride.

Approaches to an understanding of culture through study of cultural factors in the development of human personalities, and individual experiences in different socio-cultural settings. Prerequisite: a half-unit of advanced (300) work. Offered in 1980-81.

Physical Anthropology.

Consult semester course list.

Cultural Ecology: Mr. Jordan.

Relationship of man with his environment; culture as an adaptive mechanism and a dynamic component in ecological systems. Prerequisite: one-half unit of advanced (300) work. Offered in 1981-82.

Woman, Culture and Society: Miss Shapiro.

Consult semester course list.

Seminar in Social Theory: Staff (at Haverford).

Political Anthropology: Mr. MacGaffey (at Haverford).

Senior Conferences: Members of Staff.

The topic of each seminar is determined in advance in discussion with students. Sections will normally run through the entire year and have an emphasis on field research and analysis. Class discussions of work in progress, and oral and written presentations of the analysis and results of research will form the basis of evaluation for the year. Seminars are: Ethnographic Methodology, Archaeological Methodology.

Honors Work:

Honors work will be offered to seniors who petition the department with a specific proposal and whose previous work shows sufficiently high level of accomplishment and marked ability.

Independent Work:

Independent work is open usually to junior and senior majors who wish to work in a special area under the supervision of a member of the faculty, and is subject to faculty time and interest.

Astronomy

AT HAVERFORD COLLEGE

Professor: R. Bruce Partridge, D. Phil., *Chairman*

Assistant Professor: Keith H. Despain, Ph.D.

The Departmental work is designed to give students an understanding of and an interest in the universe in which they live, with emphasis upon the relation of astronomy to other fields of learning.

Major Requirements: The normal major requirements are Astronomy 211a, or Haverford Mathematics 213a and 214b or 215a and 216b, and five additional one-semester courses numbered above 200 (one of which may be replaced by an advanced physics course); Mathematics 113a and 114b or the equivalent; Physics 111a and 112b; three written comprehensive examinations of three hours each. Bryn Mawr students may substitute Mathematics 101 and 201b and Physics 101 for the mathematics and physics requirements.

Requirements for Honors: All Astronomy majors are regarded as candidates for Honors. The award of Honors will be made on the basis of superior work in the departmental courses, in certain related courses, and in the comprehensive examinations.

- 101a. *Astronomical Ideas:* Mr. Partridge, Mr. Despain.
- 102b. *Astrophysics of the Eighties:* Mr. Partridge.
- 150.* *Introduction to Astrophysics:* Members of the Department.
- 211a. *Mathematical Methods of Physics and Astrophysics:* Mr. Despain.
- 212b. *Advanced Mathematical Methods in the Physical Sciences:* Mr. Despain.
Offered in 1981-82.
- 311a. *General Relativity and High Energy Astrophysics:* Mr. Despain.
Offered in 1981-82.
- 320b. *Cosmology:* Mr. Partridge.
Offered in 1981-82.
- 340b. *Radio Astronomy:* Mr. Partridge.
Offered in 1980-81.
- 371a. *Stellar Structure and Evolution:* Mr. Despain.
Offered in 1980-81.
- 380b. *Nuclear Astrophysics:* Mr. Despain.
Offered in 1980-81.
- 480. *Independent Study.*

*Half credit course given during September-October

Biology

Professor: Robert L. Conner, Ph.D., *Chairman*

Associate Professors: Anthony R. Kaney, Ph.D.

David J. Prescott, Ph.D.

Assistant Professor of Chemistry: Kenneth Strothkamp, Ph.D.†

Lecturers: Maryann M. Jones, Ph.D.

Jane R. McConnell, Ph.D.

Betzabé Praeger, Ph.D.

Patricia Onderdonk Pruett, Ph.D., *Associate Dean for
Special Academic Programs*

Visiting Lecturer: Betty F. Thacker, Ph.D.

Assistants: Marguerite Billbrough, B.A.

Michael F. Forte, B.S.

David C. Fry, B.A.

Susan J. Gan, M.A.

Cathy A. Holmes, B.S.

Gertrude A. McKee, M.S.

Frank J. Meloni, M.S.

Lewis H. Silver, B.S.

The courses offered are designed to present the principles underlying biological science to liberal arts students interested in understanding the biotic world in which man lives and his own position in it. Primary consideration is devoted, both in class and in the laboratory, to the interplay of development, structure and function in determining the unity and diversity which characterize the plant and animal kingdoms and to dynamic interrelationships of living organisms with each other and with their environment. Genetics, cell and molecular biology and biochemistry are emphasized as unifying disciplines.

Requirements in the Major Subject: Biology 101 (unless either or both semesters are exempted), 201 a, 362a, any two of the following three courses—309b, 310b, 364b, at least one other unit (two semester-courses) of advanced work, the Senior Conference, and Chemistry 101 and 202. Physics 101 and Mathematics 101 are strongly recommended as additional courses. Students should note that the ability to read French or German is essential for graduate work.

Allied Subjects: Chemistry, Physics.

† On leave for the year 1980-81

101. *General Biology*: Mr. Kaney, Mrs. Praeger, Miss Thacker.
Laboratory: Mrs. McConnell and assistants.
A presentation of the fundamental principles of molecular, cellular and organismic biology. A selection of plants and animals is studied to illustrate problems and theories dealing with living systems and their interaction with the environment. Lecture three hours, laboratory three hours a week.
- 201a. *Genetics*: Mr. Kaney.
A study of heredity and gene action. Lecture three hours, laboratory four hours a week. Prerequisite: Biology 101 or permission of instructor.
- 309b. *Developmental Biology*.
Principles of developmental biology and vertebrate embryology. Lecture three hours, laboratory four hours a week. Prerequisite: Biology 201a. Consult semester course list.
- 310b. *Comparative and Systems Physiology*: Miss Thacker.
A study of the strategies employed throughout the animal kingdom to ensure adaptive interaction of individuals with widely-differing environments.
- 350b. *Problems in Cellular Physiology*: Mr. Conner.
An inquiry into the recent literature about membrane phenomena, including the mechanisms for bulk transport, small molecule transport and chemical specificity. Lecture two hours a week. Prerequisites: Biology 362a and 364b or permission of instructor.
- 351a. *Problems in Genetics*: Mr. Kaney.
A seminar course comprising an analysis of current topics in modern genetics. Presentations from recent literature will be discussed. Two hours a week, no laboratory. Prerequisites: Biology 201a and Biology 362a, or permission of the instructor.
- 352a. *Problems in Molecular Biology*: Mrs. Praeger.
A course dealing with current topics of interest in the field of molecular biology. Class meeting two hours a week. Prerequisites: Biology 362a and 364b.
- 353a. *Biochemistry: Macromolecular Structure and Function*: Mr. Prescott,
(INT.) Mr. Strothkamp.
The structure, chemistry and function of proteins, nucleic acids and polysaccharides are discussed with special emphasis on their roles in living systems. Lecture three hours, laboratory six hours a week. Prerequisites: Chemistry 202 and Biology 362a or permission of instructors. Physics 101 and Mathematics 101 are recommended.
- 353b. *Biochemistry: Intermediary Metabolism*: Mr. Conner, Mr. Prescott,
(INT.) Mr. Strothkamp.
Metabolic relationships of carbohydrates, lipids and amino acids are discussed with emphasis on the control of various pathways. Lecture three hours, laboratory six hours a week. Prerequisite: Biology 353a.
- 354a. *Recent Advances in Cell Biology*.
Consult semester course list.
- 355a. *Problems in Neurophysiology*.
Consult semester course list.

- 357a. *Computer Usage in the Life Sciences*: Mrs. Pruett.
 (NT.) Experiments in the life sciences will be analyzed using computer techniques. The Fortran IV language will be developed and used throughout the course. Limited to advanced students with research experience; no previous training in the use of the computer required. Lecture two hours, laboratory two hours a week.
- 58a. *Problems in Developmental Biology*.
 A seminar course devoted to the study of the role of membranes in development. Two hours a week, no laboratory. Prerequisites: Biology 201a, Biology 309b and Biology 362a, or permission of the instructor.
- 62a. *Cellular Physiology*: Mr. Conner.
 A course devoted to a study of the activities of cells in terms of physical and chemical processes. Lecture three hours, laboratory four hours a week. Prerequisites: Biology 201a and Chemistry 202, which may be taken concurrently.
- 64b. *Cell and Molecular Biology*: Mrs. Praeger.
 An examination of the ultra-structural organization, function and molecular composition of selected eukaryotic organelles. Lecture three hours, laboratory four hours a week. Prerequisite: Biology 201a.
399. *Senior Conference*:
 During one semester, all seniors will write a comprehensive paper in a prescribed area of biology in conjunction with a faculty member. These papers serve to relate materials from various subdisciplines of biology to each other, to examine subjects of current biological interest and to relate the field to the larger aspects of society. In the other semester, students will take a seminar course chosen from the available offerings.
401. *Honors Work*:
 All qualified students are encouraged to do Honors work in one of the advanced fields. This entails one unit of laboratory work on an independent experimental research problem.
403. *Supervised Research in Biology*: Members of the Department.
 Laboratory research under the supervision of a member of the Department.

Teaching Certification: A sequence of work offered by the Department of Biology and the Department of Education of the College leads to a certificate to teach in the secondary schools of Pennsylvania.

COURSES AT HAVERFORD

- 0a. *Cell Structure and Function*: Mr. Kessler, Mr. Santer, Mr. Loewy.
- 0a. *Laboratory in Electron Microscopy and Immunology*:
 Mr. Finger, Mr. Kessler, Mrs. Maticic.
- 0e. *Lab in Electron Microscopy*: Mr. Kessler.
- 1d. *Cell Biology I: Molecular and Cellular Genetics*: Mr. Finger.
- 3e. *Cell Biology III: Structure and Function of Macromolecules*: Mr. Loewy.

- 353f. *The Biosynthesis of Organelles*: Mr. Santer.
357a. *Molecular Cloning of Genes*: Mr. Goff.
400. *Senior Research Tutorial in Covalent Interactions Between Protein Molecules*: Mr. Loewy.
401. *Senior Research Tutorial in Cell Biochemistry*: Mr. Santer.
402. *Senior Research Tutorial in Gene Action*: Mr. Finger.
403. *Senior Research Tutorial in Experimental Cytology*: Mr. Kessler.
404. *Senior Research Tutorial in Regulation of Gene Expression*: Mr. Goff.
405. *Senior Research Tutorial in Protein Biochemistry*: Mrs. Matacic.
480a, f. *Independent Study*: (Consent of the instructor.)
499i. *Senior Departmental Studies*: Staff.

Chemistry

Professors: Jay Martin Anderson, Ph.D., *Director of Computing Services*
Ernst Berliner, Ph.D., *Chairman*
Frank B. Mallory, Ph.D., *Academic Deputy to the President*
George L. Zimmerman, Ph.D.

Associate Professor: Joseph Varimbi, Ph.D.

Assistant Professors: Geraldine L. Richmond, Ph.D.
Kenneth G. Strothkamp, Ph.D.‡
Charles S. Swindell, Ph.D.

Lecturer: Frances Bondhus Berliner, Ph.D.

Assistants: Tayyebah Atashroo, M.S.P.H.
Ruth H. Duffy-Downey, A.B.
Ellen Greenman, B.A.
Robert F. Krywicki, A.B.
Julie A. Mason, M.A.
Brian P. Priest, B.S.
Sylvia Riviello, A.B.
Donna Lynn Steward, A.B.

Associate Professor of Biology: David J. Prescott, Ph.D.

The major in chemistry is designed to give the student a sound background in the four major fields of chemistry: inorganic, analytical, organic and physical chemistry. The courses are arranged in such a sequence as to

‡ On leave for the year 1980-81

convey an insight into the development of chemical theories from basic scientific principles. In the advanced courses the student begins to be acquainted with current problems in special fields and with modern approaches to their solutions. The emphasis throughout is on the fundamental principles on which chemistry is based and which are exemplified and further clarified by laboratory work taken in conjunction with each course.

Requirements in the Major Subject: Chemistry 101, the three 200-level courses, one unit of advanced work and the Senior Conference. The required unit of advanced work shall consist of two semesters of courses selected from among 301b, 302a, 302b, 303a, 303b, 353, and 356b, with the provision that at least one of the semesters shall include laboratory work (i.e., 302a, 302b, 303b, 353). Physics 101 and Mathematics 101 are also required. Students are encouraged to take additional mathematics. A reading knowledge of German is valuable for work in chemistry beyond the undergraduate level.

Allied Subjects: Biology, Geology, Mathematics, Physics.

General Chemistry: Members of the Department.

An introduction to the theories of chemistry and the study of the non-metals. Introductory quantitative techniques. No knowledge of chemistry is presupposed. Three lectures, three hours of laboratory a week.

General Chemistry: Mr. Berliner, Mrs. Berliner and assistants.

Ionic equilibria and the systematic qualitative analysis of inorganic substances. A study of the metallic elements. Three lectures, three hours of laboratory a week.

Inorganic Chemistry: Mr. Varimbi.

Correlations of chemical and physical properties based on the periodic table; structures of inorganic compounds; equilibria in acid-base and complex-ion systems. Laboratory work includes analytical techniques, synthesis, purification, and characterization of a variety of compounds by chemical and instrumental methods. Three lectures, five hours of laboratory a week.

Organic Chemistry: Mr. Berliner, Mr. Swindell.

First semester: aliphatic chemistry; second semester: aromatic chemistry and natural products. Three lectures, five hours of laboratory a week.

Physical Chemistry: Mr. Zimmerman, Miss Richmond.

Elementary thermodynamics, kinetic-molecular theory of matter, and chemical kinetics. Two lectures and one conference, laboratory five hours a week. Prerequisites: Mathematics 101 and Physics 101. (The latter may be taken concurrently with Chemistry 203.)

Advanced Inorganic Chemistry: Mr. Varimbi.

Group theory and some of its applications to structural and spectroscopic problems of ligand field theory. Elements of solid state chemistry: metals, semiconductors and surface reactions. Three lectures a week.

- 302a. *Advanced Organic Chemistry*: Mr. Swindell, Mr. Berliner.
 & b. Lectures: theories and fundamental principles of organic chemistry. Laboratory: (first semester) organic qualitative analysis; (second semester) advanced synthesis and laboratory techniques. Two lectures, six hours of laboratory a week.
- 303a. *Quantum Mechanics of Atoms and Molecules*: Mr. Zimmerman or Miss Richmond.
 Prerequisite: Chemistry 203. Three lectures a week.
 An introduction to quantum chemistry with major applications to problems in chemical bonding and molecular spectroscopy.
- 303b. *Atomic and Molecular Spectroscopy*: Mr. Zimmerman or Miss Richmond.
 Prerequisite: Chemistry 303a. Three lectures, five hours of laboratory a week. Topics include atomic emission, infrared and Raman, electronic absorption, and NMR spectroscopy. In addition, radiative transition probability and group representation theories are treated.
- 304a. *The Dynamics of Environmental Systems*: Mr. Anderson.
 (INT.) Principles of structure and function of ecosystems; techniques for the simulation of complex systems; the impact of man on the environment and man's management of resources. Three hours of lecture-discussion a week. Prerequisites: one year each of a natural and of a social science and some familiarity with digital computation. Consult semester course list.
- 313a. *Mathematical and Numerical Methods in Chemistry*: Mr. Anderson.
 Selected topics from linear algebra, calculus, and differential equations as applied to problems in spectroscopy, thermodynamics, and kinetics. Three lectures per week and regular use of the computer. Prerequisites: Chemistry 203 and Mathematics 101 or equivalents; permission of the instructor.
- 353a. *Biochemistry: Macromolecular Structure and Function*: Mr. Prescott,
 (INT.) Mr. Strothkamp.
 The structure, chemistry and function of proteins, nucleic acids and polysaccharides are discussed with special emphasis on their roles in living systems. Lecture three hours, laboratory six hours a week. Prerequisites: Chemistry 202 and Biology 362a or permission of instructors. Physics 101 and Mathematics 101 are recommended.
- 353b. *Biochemistry: Intermediary Metabolism*: Mr. Conner, Mr. Prescott,
 (INT.) Mr. Strothkamp.
 Metabolic relationships of carbohydrates, lipids and amino acids are discussed with emphasis on the control of various pathways. Lecture three hours, laboratory six hours a week. Prerequisite: Biology 353a.
- 356b. *Biochemical Mechanisms*: Mr. Lerman (at Haverford).
 Study of mechanisms of enzyme-catalyzed reactions; the principles of chemical catalysis and the special features of biological catalysts; experimental methods of probing enzyme active site structure and function; interpretive reading of the original literature. Previous introductory exposure to protein structure and general metabolism is helpful although not formally required. Prerequisite: Chemistry B202 or H203a.

399. *Senior Conference:*

The Senior Conference consists of four half-semester special topic seminars. In each year, eight such seminars will be offered. Four of these will be given at Bryn Mawr and four at Haverford, and students are free to select the seminars at either institution according to their own interests and preparation. These special seminars will be in the broad areas of chemistry, for instance, biochemistry, inorganic, organic and physical chemistry, and will cover subject matter not usually taken up, or only briefly treated, in regular courses. They will be on a level which has at least one semester of a 200-level course as a prerequisite. The topics will vary from year to year, and a list of topics will be made available to students at the end of the school year or the following fall.

401. *Honors Work:*

Honors work, consisting of individual research under the supervision of a member of the Department, may be undertaken by qualified students who are invited by the Department to participate in this program.

403. *Independent Research:*

Any chemistry major may elect to do individual research under the supervision of a member of the Department with the approval of the faculty member who would be supervising the work.

Teaching Certification:

A sequence of work offered by the Department of Chemistry and the Department of Education of the College leads to a certificate to teach in the secondary schools of Pennsylvania.

Classical and Near Eastern Archaeology

Professors: Machteld J. Mellink, Ph.D., *Chairman*

Kyle M. Phillips, Jr., Ph.D., *Resident Director*
of Massenzia, Rome

Brunilde S. Ridgway, Ph.D.

Associate Professor: Richard S. Ellis, Ph.D.*

Assistant Professors: James C. Wright, Ph.D.

Kathleen S. Wright, Ph.D.†

Lecturer: Gloria F. Pinney, Ph.D.

Professor of Classical and Near Eastern Archaeology and of History of Art:
Phyllis Pray Bober, Ph.D.

Professor of Latin: Russell T. Scott, Ph.D.

Assistants: Kim Hartswick, M.A.

Nancy Westneat Leinwand, M.A.

* On leave semester I, 1980-81

† On leave for the year, 1980-81

The major courses provide an extensive survey of the ancient Mediterranean and Near Eastern civilizations, with emphasis on classical art and archaeology.

Requirements in the Major Subject: Archaeology 101, 201a or b (or another Near Eastern course), 203a and b, 205b, 301a, 302a (or another course in Ancient Architecture) and the Senior Conference. All majors are urged to take ancient history and Greek (or another ancient language) and to acquire a reading knowledge of French and German.

Requirements for the Minor in Archaeology: Archaeology 101 plus two full units of course work to be determined in consultation with the Department and in accordance with the specific interests of each student.

Allied Subjects: Ancient History, Anthropology, Geology, Ancient Philosophy, History of Art, Greek, Latin, Akkadian, Hebrew.

101. *An Introduction to Ancient Art:* Mrs. Ridgway.
An historical survey of the art of the ancient Near East, Greece and Rome. Three hours of classes, one hour of informal discussion a week.
- 201a. *The Archaeology of Mesopotamia before 1600 B.C.:* Mr. Ellis.
Offered in 1980-81 and alternate years.
- 201b. *The Archaeology of Mesopotamia after 1600 B.C.:* Mr. Ellis.
Offered in 1981-82 and alternate years.
- 202a. *Hittite Archaeology:* Miss Mellink.
Offered in 1980-81.
- 203a. *Greek Sculpture:* Mrs. Ridgway.
The development of Greek sculpture to the Hellenistic period.
- 203b. *Hellenistic and Roman Sculpture:* Mrs. Pinney.
From the Hellenistic period to the end of the Roman Empire.
- 205a. *The Ancient Near East:* Mr. Ellis.
See History 205a.
- 205b. *Aegean Archaeology:* Mr. Wright.
The pre-Greek and early Greek cultures of the Aegean area: Minoan Crete, Troy, the Aegean Islands, Mycenaean Greece and their overseas connections.
- 206a. *Egyptian Archaeology:* Mr. Ellis.
- 206b. *Architecture and Cities of the Ancient Near East:* Mr. Ellis.
- (INT.) Building techniques, forms and functions of structures, settlements and cities; effects of environment and social structure.
- 207b. *Ancient Greek Cities and Sanctuaries:* Mr. Wright.
- (INT.) A study of the form and cultural importance of three major Greek centers: the Athenian acropolis and the sanctuaries of Delphi and Olympia.
- 301a. *Greek Vase-Painting:* Mrs. Pinney.
Greek vase-painting as an original form of art, its relation to other arts, and its place in archaeological research.
- 301b. *Hellenistic and Roman Pottery:* Mrs. Wright.
The study of pottery in archaeological and historical context.

- 302a. *Greek Architecture*: Mr. Wright.
(INT.) The Greek architectural tradition in its historical development.
- 302b. *Roman Architecture*: Mr. Scott.
(INT.) The architecture of the Republic and the early Roman Empire.
- 303b. *Etruscan Archaeology*: Mrs. Pinney.
An introduction to the sites and monuments of Etruria.
- 304a. *Monumental Painting*: Mrs. Pinney.
The arts of wall painting and mosaics in the Greek world and in Italy from the archaic period to the third century A.D.
- 305b. *The Bronze Age in Syria and Palestine*: Mr. Ellis.
The archaeology of the Levant and its relationships with surrounding cultures from the beginnings of urban civilization to the disturbances caused by the Sea Peoples c. 1200 B.C.
399. *Senior Conference*:
Weekly two-hour seminars with assigned reading and reports. Semester I, 1980-81: Mr. Wright; Semester II: Mr. Ellis.
401. *Honors Work*:
A long written paper is submitted on a topic selected by the student and approved by the Department. In preparation, the student confers throughout the year with the member of the Department under whose direction the paper is prepared.
- Interdepartmental Work*:
The Department of Classical and Near Eastern Archaeology participates in the interdepartmental majors in Classical Studies and The Growth and Structure of Cities. See pages 162.
- Excavation*:
The Department has two excavation projects. The excavation of Karataş-Semayük in Lycia (Turkey) is now in the stage of research and publication. The second project, the excavation of an Etruscan archaic site at Murlo near Siena, is now conducted as a summer program for advanced undergraduate and graduate students. The students are trained in excavation and conservation techniques and are given instruction in Etruscan archaeology during supervised trips to sites and museums. The program is conducted jointly by Professor Kyle M. Phillips, Jr. (Bryn Mawr College) and Professor Erik Nielsen (Bowdoin College).

Dance

Instructors: Linda Caruso Haviland, M.Ed.
Paula Carter Mason, B.S.

Bryn Mawr does not offer a major program in dance. Introductory and intermediate technique courses are taught as part of the physical education program. (See page 173.) For those interested in composition and theory or in intensive and advanced work in technique, the following courses are offered for academic credit:

- 101a. *Dance Composition:* Mrs. Haviland, Mrs. Mason.
- & b. Designed to teach modern dance technique in conjunction with choreographic theory. Assignments in composition are given to aid artistic awareness and the development of performing skills.
- 201a. *Modern Dance: Advanced Choreography:* Mrs. Haviland, Mrs. Mason
- & b. (Offered on demand.)
- 202a. *Modern Dance: Advanced Technique and Dance Processes:* Mrs. Haviland, Mrs. Mason.

This course provides students with intensive experience in the medium of dance movement and with grounding in the creative, critical, and conceptual processes of dance. It affords them personal experiential sources for grasping the significance, processes and potentials for use of dance as a performing art and as a humanity. The technique section meets three times weekly, one and one-half hours per session. An additional lecture hour per week is required. Over the course of the semester, this lecture hour will be used to consider and accomplish assignments within three different areas: movement improvisation; cultural, historical, and philosophical perspectives of dance; and dance criticism.

Economics

Professor: Richard B. Du Boff, Ph.D., *Chairman*

Associate Professors: Noel J. J. Farley, Ph.D.

Helen Manning Hunter, Ph.D.

Lecturer: Frances E. Altvatter, A.B.

Visiting Lecturer: Laurence Seidman, Ph.D.#

AT HAVERFORD

Vice-President: Samuel Gubins, Ph.D.

Professor: Holland Hunter, Ph.D.

Associate Professor: Vernon J. Dixon, Ph.D.

Assistant Professor: Michael Weinstein, Ph.D.

Instructor: Juan Lara, B.A.

The major in economics consists of courses given at Bryn Mawr and Haverford. It is designed to provide an understanding of economic processes and institutions and the interactions among the economic, political and social structures, to train students in the methods used to analyze those processes and institutions, and to enable them to make policy judgments.

Requirements in the Major Subject: Economics 111a or b and 112a or b, three units of intermediate and advanced work (including Economics 203a or b and at least one unit of 300-level courses) and the Senior Conference. Courses 111 and 112 are designed to give the informed perspective on economic principles and problems that is an integral part of a liberal education, as well as to provide a foundation to do further work in economics and business. The group of intermediate courses offers a full range of material on major topics in the discipline and is intended to meet a variety of student interests. The advanced courses supply a methodological and theoretical foundation for those planning to make use of economics in their professional careers. Students majoring in economics are urged to take at least two of the following courses: 300a or b, 301b, 302a or b, 303a. Students intending to do graduate work in economics should take 304b and Mathematics 101 and 201.

Prospective majors in economics are advised to take Economics 111 and 112 by the end of the first semester of the sophomore year.

Allied Subjects: Mathematics, Political Science, History, Philosophy, Psychology, Sociology, Anthropology.

Under the program for faculty exchange with Swarthmore College

- 111a. *Introduction to Macroeconomics*: Members of the Department.
 or b. The analysis of aggregate economic activity, including consumption, investment, public spending, and money and credit. Theories of inflation and unemployment. The role of government in influencing total expenditures and regulating financial institutions. The international role of the United States.
- 112a. *Introduction to Microeconomics*: Members of the Department.
 or b. Techniques of analysis pertaining to the individual industry, the firm, and consumer choice. The functioning of markets under competition and monopoly. Determination of prices for goods and factors of production, and the distribution of income. Efficiency, equity, and market failure. Comparative advantage and international trade.
- 201b. *Economic Accounting*: Mr. Hunter (at Haverford).
- 203a. *Statistical Methods in Economics*: Mrs. Hunter, Mr. Weinstein.
 or b. Frequency distributions, probability and sampling theory, simple correlation and multiple regression and an introduction to econometric terminology and reasoning. The computer programming and other techniques required are developed as part of the course. Prerequisites: Economics 111 and 112.
- 206a. *International Economics*: Mr. Farley.
 or b. International exchange in the nonproduction situation. Comparative advantage, the Heckscher-Ohlin theorem, and the gains from trade. Empirical studies of the basis of U.S. trade. Price agreements on primary commodities. Market structure, multinational firms, and foreign investment. Tariff theory and trade between industrialized and developing countries. Prerequisites: Economics 111 and 112 or permission of instructor.
- 207b. *Money and Banking*: Mrs. Hunter.
 The development and present organization of the financial system of the United States. Domestic and international problems of monetary theory and policy. Prerequisites: Economics 111 and 112.
- 211a. *The Soviet System*: Mr. Hunter (at Haverford).
 (INT.)
- 212b. *Comparative Economic Systems*: Mr. Farley, Mr. Lara.
 Comparative analysis of decision-making in resource allocation, income distribution, and techniques of production. Assessment of results under various systems in terms of efficiency, equity, and growth. Case studies of the United States, Britain, Soviet Union, Yugoslavia, and other nations. Prerequisites: Economics 111 and 112. Consult semester course list.
- 213b. *Industrial Organization and Public Policy*: Miss Altvatter.
 Theoretical and empirical analysis of market structure, firm behavior, corporate performance, and government policy in static and dynamic settings. Topics include industrial concentration, collusive pricing, advertising, R&D, conglomerates, antitrust enforcement, public utility regulation. Case studies include automobile, steel, computer, telephone, and oil industries. Prerequisite: Economics 112.

- 214a. *Public Finance*: Mr. Seidman.
Analysis of the effects of tax policies and government expenditure programs on the distribution of income and economic efficiency. Special topics include tax reform and capital formation, consumption vs. income taxes, social insurance; general equilibrium tax incidence, public goods and externalities; tax policy and inflation. Prerequisites: Economics 111 and 112. Offered in 1980-81 and alternate years.
- 215a. *Urban Economics*: Mr. Dixon (at Haverford).
- 216b. *Economics of the Non-Profit Sector*: Mr. Gubins (at Haverford).
- 221b. *United States Economic Development*: Mr. Du Boff.
Long-term trends in output, resources and technology, and structural change, with emphasis on the rise of "big business" after 1870. Foreign trade and investment and the role of government. The framework is one of imbalances and disequilibria in an expanding capitalist economy. Prerequisites: Economics 111 and 112.
- 222a. *History of Economic Thought*: Mr. Du Boff.
Examination of the Mercantilists, the Physiocrats, Smith, Malthus, Ricardo, Marx, Mill, Marshall and Keynes. Emphasis on the development of economic theory; also economic growth and the stationary state, value and distribution, and the role of the state. Prerequisites: Economics 111 and 112 or permission of instructor. Offered in 1980-81 and alternate years.
- 223a. *History of Inequality and Work in the United States*: Mr. Weinstein (at Haverford).
- 224a. *Economic History and Growth, 1750-1980*: Mr. Du Boff.
The development of the international market economy from the Industrial Revolution to World War II and its aftermath, with focus on Great Britain, France and Germany. Topics include causes of economic growth and underdevelopment, the spread of industrialization and technological modernization, large-scale business enterprise, foreign trade and political power. Prerequisites: Economics 111 and 112 or permission of instructor. Consult semester course list.
- 225a. *Developing Economies*: Mr. Farley, Mr. Hunter.
Analysis of the structural transformations of developing economies. Causes and roles of savings, investment, skills, technological change and trade in the development process; strategies and methods of economic planning. Prerequisites: Economics 111 and 112.
- 226a. *Cliometric History of the United States*: Mr. Weinstein (at Haverford).
- 230a. *Topics in Economics*: Members of the Department.
or b. Courses in the 230 series deal with contemporary problems from the economist's viewpoint. They are offered, as demand and staffing permit, in the following areas: inflation, Latin American economic development, radical political economy, cross-cultural studies, international trade and finance. Students should inquire about prerequisites from instructor.
- 300a. *Microeconomic Analysis*: Miss Altvatter.
or b. Systematic investigation of analytical relationships underlying consumer

welfare, efficient resource allocation, ideal pricing, and distribution. Half of the course is devoted to application of microeconomic theory to current problems. Prerequisites: Economics 111 and 112. Normally, the spring semester relies on calculus.

301b. *Interindustry Analysis*: Mr. Hunter (at Haverford).

302a. *Macroeconomic Analysis*: Mr. Dixon, Mr. Lara (at Haverford).

or b.

303a. *Quantitative Analysis of Economic Change*: Mrs. Hunter.

Survey of dynamic macroeconomic models, including their statistical estimation. Theory and practice of forecasting and simulation with econometric models; time series analysis. The necessary matrix algebra and computer techniques are developed in the course. Prerequisite: Economics 203.

304b. *Introduction to Econometrics*: Mrs. Hunter.

The econometric theory presented in Economics 203a and b is further developed and its most important empirical economic applications are considered. Each student will do a six-week empirical research project using multiple regression and other statistical techniques. Prerequisites: Economics 203 and permission of instructor.

306a. *Advanced International Economic Policy*: Mr. Farley.

Advanced models of economic integration. Trade and economic change in developed and developing economies. Foreign capital movement. Exchange rate determination. Prerequisite: Economics 206 or 225.

307b. *Advanced Economic Theory*: Mr. Weinstein (at Haverford).

399. *Senior Conference*:

Weekly seminars for which readings are assigned and reports are prepared. Semester I: microeconomic topics; Semester II: macroeconomic and institutional topics. Student preferences help select topics. Majors may substitute an independent research paper for one of the two semesters.

401. *Honors Work*:

One unit of Honors work may be taken by students recommended by the Department.

Interdepartmental Work:

The Department of Economics participates in the interdepartmental major in The Growth and Structure of Cities and in the interdepartmental concentration in Hispanic and Hispanic-American Studies. See pages 164 and 166.

Teaching Certification:

A sequence of work offered by the Department of Economics and the Department of Education of the College leads to a certificate to teach in the secondary schools of Pennsylvania.

Education and Child Development

Professors: Janet L. Hoopes, Ph.D., *Director, Child Study Institute*
Ethel W. Maw, Ph.D., *Chairman*

Associate Professors: Susan E. Maxfield, M.S., *Director, Thorne School*
Emmy A. Pepitone, Ph.D.
Faye P. Soffen, Ed.D. §

Lecturers: Ruth B. Harvey, Ph.D.
Robert H. Wozniak, Ph.D.

Assistant: Frank Schwoeri, M.A.

The work in education is designed for students preparing for teaching or for work with children in a variety of fields. The curriculum treats the nature and development of the child, the psychology of teaching and learning and principles of measurement. It deals with the history, philosophy and objectives of the school as a social institution.

Although there is no major in education, a sequence of courses in the Department enables the student to prepare for teaching in the secondary school. Students expecting to teach are urged to confer with the Department during the freshman year.

For students preparing for teaching, the first semester of the senior year is an extremely busy one. During student teaching, the student must be prepared to be in the school throughout the school day, five days a week.

The Thorne School is maintained by the Department as a laboratory for child study where undergraduates have experience with young children. The pre-kindergarten program, in which advanced students assist, provides training for those planning to teach.

The Department also operates the Child Study Institute which is a mental health service supported by the College, by the Lower Merion Township Schools and by fees. At the institute, learning and behavior problems are studied; psychological testing, psychiatric treatment, remedial teaching and a counseling program for children and parents are also carried on. Graduate students participate in the work, and undergraduate and graduate students observe in the schools and at the Institute.

201b. *The Social Foundations of Education:* Mrs. Pepitone.

Public schools are examined as social systems within the context of urban society. Topics include equality of educational opportunity, desegregation, effects of schooling on women and minority groups. Interpersonal classroom dynamics are studied through visits to local high schools.

§ On partial leave for the year 1980-81

- 202b. *History and Philosophy of Education*: Mrs. Pepitone.
A study of the interrelation of education and culture from earliest times to the present day with particular consideration given to current educational issues as they are rooted in the educational process.
- 203b. *Educational Psychology*: Mr. Wozniak.
Topics in the psychology of human cognitive, social, and affective behavior are examined and related to educational practice. Laboratory work is required. Prerequisite: Psychology 101.
- 206a. *Developmental Psychology*: Mr. Wozniak.
The development of cognitive, social, and affective behavior with an emphasis on early and middle childhood. Laboratory work is required. Prerequisite: Psychology 101.
- 207b. *Adolescent Development*: Mrs. Harvey.
Patterns and problems of development—physical, cognitive, emotional and social—as they relate to the adolescent period. Theory and research focusing on adolescents in home, school and society. Three hours a week with laboratory or other independent work required. Prerequisite: Education 206a or permission of instructor.
- 301a. *Principles of Teaching in the Secondary School*: Mrs. Maw.
The objectives, curriculum and organization of the secondary school. The nature of the learner and his relation to the school program and aims. Two-hour seminar a week; student teaching in the junior or senior high school. A full unit of work. Prerequisite: permission of instructor.
- Selected Graduate Seminars:*
For certain undergraduates who have taken developmental psychology or educational psychology the following graduate seminars are open upon the consent of the instructor with the permission of the student's class dean and the Dean of the Graduate School of Arts and Sciences:
- Critical Issues in Human Development*: Mr. Wozniak.
Psychological Disorders of Children: Mrs. Harvey.
- Teaching Certification:*
Requirements for the state certificate to teach in the public secondary schools can be met by the appropriate selection of courses in this Department and in the major field or fields. Though each state has its own requirements, most follow the same pattern, namely the Bachelor of Arts degree with emphasis upon a content area offered in the secondary school plus professional preparation for teaching. Students preparing for teaching should confer with the Department when selecting from the above list of courses.

English

Professor: Robert B. Burlin, Ph.D.†

Professor of English and Performing Arts: Robert H. Butman, M.A.

Associate Professors: Carol L. Bernstein, Ph.D.

Sandra M. Berwind, Ph.D., *Chairman*

Thomas H. Jackson, Ph.D.

Joseph E. Kramer, Ph.D.

Assistant Professors: Peter M. Briggs, Ph.D.

Katrin Ristkok Burlin, Ph.D.

Susan Dean, Ph.D.

E. Jane Hedley, Ph.D.‡

Eileen Tess Johnston, Ph.D.

Annette Niemtzow, Ph.D.

Lecturers: Diane Balestri, Ph.D.

Christopher Davis, A.B.

Christina M. Gillis, Ph.D.

Christopher Kendrick, A.B.

Ramona T. Livingston, A.B.

Karen H. Putnam, Ph.D.

Instructor: Paula Mayhew, M.A.

The Department offers an opportunity to explore all periods of English literature. Through comprehensive reading as well as close analysis, the major in English seeks to develop an historical perspective, critical and writing abilities, and an understanding of the imaginative process.

Requirements in the Major Subject: Prerequisite: English 101a and b (Bryn Mawr or Haverford) or its equivalent. Four second-year or advanced units in English literature. At least one full unit must be at an advanced (300) level. At least one half-unit must be in the literature of the Middle Ages.

In consultation with departmental advisers and with the approval of the Department, students may offer one half-unit of appropriate inter-departmental work toward fulfillment of the four-unit requirement. Students may in consultation with their departmental advisers take a portion of their work at Haverford. The Senior Conference.

Requirements for an English Minor: English 101a and b (Bryn Mawr or Haverford) or its equivalent. Two second-year or advanced units in English literature. At least one-half unit must be at an advanced (300) level.

† On leave semester II, 1980-81

‡ On leave for the year 1980-81

Allied Subjects: Majors are urged to build a strong ally in classical or modern literature, History, Philosophy or History of Art. Other courses in Anthropology, Music, History of Religion, Political Science, Sociology and Linguistics may also be counted at the discretion of the English Department. Advanced writing courses may be substituted for one unit of allied work.

Students contemplating graduate work in English are reminded that most graduate schools require a reading knowledge of French and German, and frequently Latin as well, for the Ph.D.

015. *English Composition and Reading:* Members of the Department. Training in writing discursive prose, with emphasis on the critical analysis of a few works by selected authors. There will be weekly papers, two class meetings a week and regular conferences. Brief descriptions of the topics and reading lists will be sent to each student in May, to allow her to indicate her preference. (Note: there is one division of this course, called "Readings in English Literature," which may be substituted for the prerequisite to the English major. In this division there will be three class meetings a week, as well as more reading. The paper requirements are the same as for the other divisions.)

WRITING COURSES

Weekly papers are required in the following courses. Students who cannot meet this requirement should not elect them.

- 190a. *Introduction to Creative Writing:* Mr. Ashmead (at Haverford).
or b.
- 191a. *Feature Writing:* Mr. Davis.
Students will work on several short documented articles or on one or two long ones during the semester. Research will be in the field—investigation and interviews—as well as in the library. Exploration of editing techniques demands work in successive drafts, each to be treated as a distinct assignment. Consult semester course list.
- 192a. *Fiction Writing:* Mr. Davis.
Class discussion, conferences, and reading and writing (re-writing) assignments are designed to give students an opportunity to find out something about subject, form, language as medium, and the art of re-working material. Offered in 1980-81.
- 193b. *Advanced Fiction Writing:* Mr. Davis.
Students will work in short or long prose fiction forms and be expected to produce a substantial amount of material, written and rewritten. A portfolio of work may be required for entrance. Prerequisites: 190a or b or 192a. Offered in 1980-81.
- 195b. *Verse Composition:* Mr. Davis.
A course designed to allow students an opportunity to discuss problems of

the craft with their fellows. Students should be prepared to submit samples of work for entrance. Consult semester course list.

- 198a. *Playwrighting and Production*: Mr. Butman.
Writing of two original one-act plays.
- 198b. *Advanced Playwrighting and Production*: Mr. Butman
Writing of a full-length play and preparation of its production-book. Prerequisite: permission of instructor.

LITERATURE

- 101a. *Major Works in English Literature*: Members of the Bryn Mawr and
& b. Haverford Departments.
This prerequisite to the English major, taught jointly at Haverford and Bryn Mawr, is the critical study, in chronological sequence, of major works by major authors, including Chaucer, Spenser, Shakespeare, Milton, Pope and Wordsworth, and one other major work. The emphasis will be on close reading and on the continuity of traditions and modes in English and American literature. English 101a or its equivalent is the prerequisite for 101b.
- 128b. *Modern Drama*: Mr. Kramer.
Major developments in the theater from Ibsen to the present will be explored. Close attention will be given to traditions and conventions associated with the specific theaters such as the Abbey, the Moscow Art and the Group, and to schools of playwrighting. (Not for major credit.) Offered in 1980-81.
- 201a. *Chaucer and His Contemporaries*: Mr. Burlin, Miss Hansen (at Haverford).
& b. The first term will be devoted to a close reading of the *Canterbury Tales*. The second term will concentrate upon Chaucer's early poems and the *Troilus*, with supplementary readings. (Instructors share the course regularly.)
- 210a. *Literature of the English Renaissance: Sixteenth-Century*: Mrs. Hedley.
Introduction to the major Renaissance genres, both in prose and poetry. Authors will include More, Wyatt, Gascoigne, Spenser, Sidney and Marlowe. Offered in 1981-82.
- 210a. *Literature of the English Renaissance: Drama exclusive of Shakespeare*:
Miss Garber (at Haverford). Offered in 1980-81.
- 211b. *Lyric Poetry of the English Renaissance*: Mrs. Hedley.
Both the continuity of the lyric tradition that begins with Wyatt and the distinctiveness of each poet's work will be established. Consideration will be given to the social and literary contexts in which lyric poetry was written. In addition to Wyatt, Sidney, Shakespeare, Donne and Jonson will be read. Offered in 1981-82.
221. *English Drama to 1642*: Mr. Kramer.
A chronological survey of drama in England to the closing of the theaters in 1642. Special attention will be paid to theatrical conventions and to the elaboration of specific forms. Consult semester course list.

- 225a. *Shakespeare*: Mr. Kramer, Miss Garber (at Haverford).
 & b. A chronological survey of the Shakespearean canon. (Instructors alternate annually.)
- 229b. *American and British Drama, 1950 to Present*: Mr. Ashmead (at Haverford);
- 230b. *Literature of the English Renaissance: Seventeenth-Century*: Mr. Kendrick.
 Consult semester course list.
- 231a. *Milton*: Mr. Kendrick.
 Consult semester course list.
- 240a. *Restoration and Early Eighteenth-Century Literature*: Mr. Briggs.
 Developments to be examined in the first semester include the rise of new literary genres and the contemporary effort to find new definitions of heroism and wit, good taste and good manners, sin and salvation. Principal readings will be drawn from Dryden, the Restoration dramatists, Swift and Pope. Offered in 1980-81.
- 247a. *Eighteenth-Century English Novel*: Mrs. Burlin.
 A study of selected novels in the context of relevant eighteenth-century intellectual trends and critical approaches: Defoe, Richardson, Fielding, Smollett, Sterne, Radcliffe, Burney, Edgeworth. Offered in 1981-82.
- 250a. *Nineteenth-Century English Poetry*: Mrs. Johnston.
 & b. A study of the major poets from Blake to Hardy, including some of their key theoretical writings. The development of several traditions, themes and forms will be emphasized. Offered in 1980-81.
- 252a. *The Romantic Movement*: Mrs. Bernstein.
 Introduction to the work of the major Romantic poets: Blake, Coleridge, Wordsworth, Byron, Shelley, Keats. Study of the central texts in light of the emerging poetics and the distinctive ideas of the age. Offered in 1981-82.
- 254a. *The Victorian Period*: Mrs. Hutchinson (at Haverford).
 Offered in 1980-81.
- 258b. *The Development of the Novel*: Mr. Lester (at Haverford).
 Offered in 1980-81.
- 259a. *The Nineteenth-Century English Novel*: Mrs. Burlin.
 The study of selected novels in the context of relevant nineteenth century intellectual trends and critical approaches: Austen, Dickens, Thackeray, Charlotte and Emily Brontë, Trollope, Eliot. Offered in 1980-81.
- 260a. *American Literature to 1915*: Mrs. Dean, Miss Niemtzow, Mr. Ransom (at
 & b. Haverford).
 The first semester will consider American literature from its beginnings to the Civil War, and will include work by Puritan writers; by writers of the Federal Period; and by Romantics, such as Cooper, Emerson, Thoreau, Hawthorne, Melville, Whitman. The second semester will address works from the Civil War to 1915 and will include selections from Whitman, Dickinson, Twain, Howells, Jewett, Chopin and Stephen Crane. (Instructors alternate.)
- 261a. *Afro-American Literature*: Mrs. Sanchez (at Haverford).
 Offered in 1980-81.

- 264a. *American Literature, 1915-1940*: Mrs. Dean, Miss Niemtzw, Miss Francesconi (at Haverford).
 & b. Semester I will include works of prose and poetry written between the First and Second World Wars, with attention to the development of new themes and techniques. Includes such writers as: Frost, Stevens, Williams, Crane; Anderson, Stein, Hemingway, Fitzgerald, Faulkner; O'Neill.
 Semester II will include selected works of prose and poetry written from the Second World War to the present, with attention to the development of new themes and techniques. Includes such writers as: Norman Mailer, John Updike, Saul Bellow; Eudora Welty, Flannery O'Connor, Walker Percy; Ralph Ellison, Toni Morrison, Malcolm X; Vladimir Nabokov, Joseph Heller; Theodore Roethke, Robert Lowell, John Berryman. (Instructors alternate.)
- 268a. *American Fiction and Its Criticism, 1950 to Present*: Mr. Ashmead (at Haverford). Offered in 1980-81.
- 269b. *Women Writing in America*: Miss Niemtzw.
 A study of selected texts by women writing in America. Readings will be drawn from such well-known authors as Bradstreet, Fuller, Dickinson, Alcott, Stein, Wharton and Rich, as well as from lesser known writers. This course will also provide an introduction to feminist criticism. Consult semester course list.
- 272a. *Nineteenth-Century American Novel*: Miss Niemtzw.
 An examination of the origin and development of the American novel. Readings will be drawn from Brown, Cooper, Hawthorne, Melville, Twain, Jewett, James, as well as from other writers. Consult semester course list.
- 275a. *Twentieth-Century Literature*: Mrs. Berwind, Mr. Jackson.
 & b. Twentieth-century literature in its relationship to earlier literary and intellectual traditions, principal themes and technical achievements, seen through extensive study of selected major twentieth-century writers. Considerable attention will be paid to the skills of critical writing.
- 279a. *Modern African Fiction*: Mr. Jackson.
 Works by African writers, chiefly black, since liberation in Kenya, Nigeria, Ghana, and elsewhere. Achebe, Soyinka, Abrahams, Lessing and Tutuola will be among the authors included. Offered in 1981-82.
- 280a. *Tragedy*: Mr. Rose (at Haverford).
 Offered in 1980-81.
- 282a. *The Lyric*: Mrs. Berwind, Mrs. Hedley, Mrs. Johnston.
 Instruction in the analysis of short poems from different periods. There will be some discussion of critical theory, but most of the time will be spent learning to identify and negotiate with the verbal structures—prosodic, rhetorical, figurative—by which poems express their meaning. (Instructors alternate.) Offered in 1981-82.
- 284a. *The Nineteenth-Century Urban Novel*: Mrs. Bernstein.
 A study of the novels of Victorian cities with attention to the themes, characters, symbols and plots which arise from the urban milieu. Authors

will include Dickens, James, Gissing, Gaskell, Trollope, Conrad. Offered in 1980-81.

- 285a. *The Language of Drama*: Mr. Burlin.

A look at dramatic language and plays "about" language. Readings from the English drama of the past four centuries. Offered in 1980-81.

- 288a. *Introduction to Literary Theory and Criticism*: Mr. Rose (at Haverford). Offered in 1980-81.

The following courses are open primarily to advanced students; enrollment will be restricted at the discretion of the instructor.

300. *Old English Literature*: Mr. Burlin.

After a brief introduction to the language and some reading of prose, the first semester will be devoted to short lyrics and questions of Old English poetic style; the second semester to a careful study of the textual and critical problems of *Beowulf*. This is a full year course and the second semester cannot be taken unless the student has prior training in the language. Offered in 1981-82 and alternate years.

- 301b. *Readings in Middle English Literature*: Mr. Burlin.
Offered on demand.

- 302a. *Topics in Medieval English Literature*: Miss Hansen (at Haverford). Offered in 1980-81.

- 315b. *Sixteenth-Century Chivalric Romance*: Mrs. Hedley.

The entire semester will be devoted to Sidney's *Arcadia* and Spenser's *Faerie Queene*. Offered in 1981-82.

- 323a. *Forms of Renaissance Tragedy*: Mr. Kramer.

Specimen tragedies of Marlowe, Shakespeare, Chapman, Jonson, Webster, Middleton, Tourneur, Ford and others will be considered along with some non-dramatic material. Offered in 1980-81.

- 325b. *Topics in Shakespeare*: Mr. Kramer, Miss Garber (at Haverford).

- 326b. *Theater of Ben Jonson*: Mr. Kramer.

The comedies, tragedies and masques of Jonson will be studied closely. Theatrical contexts will be established through consideration of other seventeenth-century plays and of the techniques of production then current. Offered in 1980-81.

- 333b. *The Metaphysical Poets*: Mrs. Hedley.

Primarily Donne, Herbert, Vaughan, Marvell. Consult semester course list.

- 340b. *Samuel Johnson and His Circle*: Mr. Briggs.

Readings will include a broad selection of Johnson's works, together with shorter samplings from Burke, Goldsmith, Boswell, Reynolds, and some of Johnson's literary adversaries. Offered in 1980-81.

- 352b. *Romanticism and Interpretation*: Mrs. Bernstein.

Problems of interpretation, from such perspectives as language and myth, in the work of writers in the Romantic tradition. Reading will include works by Coleridge, Wordsworth, Shelley, Keats, Mary Shelley, Emily Brontë and Hopkins, as well as seminal modern texts on the Romantics. Offered in 1981-82.

- 356a. *Victorian Literature and the Religious Experience*: Mrs. Johnston.
The course aims to study, in the context of cultural and literary history, the dialectic of faith and doubt in the minds of many Victorian writers. It will address the problems of how religious questions (both personal dilemmas and public controversies), ideas, values and paradigms of experience informed the authors' literary choices about genre, structure, point of view, characterization, imagery and style. The primary readings will include crisis autobiographies, lyric poems, dramatic monologues, polemical and theoretical writings, and popular and serious novels. Offered in 1981-82.
- 358a. *"Women of Talents"*: Mrs. Burlin.
- & b. Selected eighteenth, nineteenth and twentieth century English female novelists. Emphasis will be on the thematic and formal relationships between novels by Burney, Austen, Charlotte and Anne Brontë, Eliot, Gaskell, Woolf, Murdoch and Drabble. Offered in 1980-81.
- 363a. *Walt Whitman and American Poetry*: Mrs. Dean.
A study of the poetry and poetics of Walt Whitman, giving attention to his poetic predecessors in English and American literature, and to his twentieth-century successors (including such poets as H. Crane, W. C. Williams, Charles Olson, Allen Ginsberg and/or others). Prerequisite: English 260a or 260b or 264b or the equivalent or permission of the instructor. Offered in 1980-81.
- 364b. *Topics in American Literature: T. S. Eliot*: Mr. Rose (at Haverford).
- 365a. *American Autobiography*: Miss Niemtzw.
A study of selected texts in the genre, from the Puritans to the present. Consult semester course list.
- 365b. *The American Dream*: Miss Niemtzw.
Political, social, and economic visions of America based on a selection of literature from the Puritans to the present. Consult semester course list.
- 366b. *Herman Melville*: Miss Niemtzw.
An intensive study of Melville's novels and tales, with some attention to his journals and letters. Consult semester course list.
- 367a. *Topics in American Literature: Mark Twain*: Miss Robert (at Haverford). Offered in 1980-81.
- 368a. *Topics in American Literature: William Faulkner*: Mr. Ashmead (at Haverford). Offered in 1980-81.
- 371b. *The Development of Modern Poetry*: Mr. Jackson:
The background and early stages of modern poetry, including Imagism and its offshoots. Readings in the early work of various leading modernists, primarily Yeats, Pound and Eliot, and some discussion of the French poetry that influenced them (competence in French helpful but not essential). Critical and historical reading in A. G. Lehmann's *Symbolist Aesthetic in France* and Hugh Kenner's, *The Pound Era*, among others. Offered in 1980-81.
- 374b. *Topics in British Literature: James Joyce*: Mr. Lester (at Haverford). Offered in 1980-81.

- 375a. *W. B. Yeats and Wallace Stevens: Mrs. Berwind.*
A study of the techniques developed by two major poets for exploring some of the fundamental philosophical problems of the twentieth century. Offered in 1980-81.
- 376b. *Beckett and Lawrence: Mr. Jackson.*
Extensive reading in the works in various genres of two artists who represent two fairly polar traditions in modern prose. Long and short works of both authors will be covered, as well as some early work of James Joyce and some experimental fiction of European Modernism. Consult semester course list.
- 383b. *The Novel and Society: Mrs. Bernstein.*
A study of the relation between the aesthetic form of novels and their claims to represent social or historical reality or to incorporate ideas about society. Reading will include a group of novels, primarily from the nineteenth century, that offer diverse perspectives on these issues, as well as critical writing on topics ranging from mimesis to ideology. Offered in 1980-81.
- 384a. *Theories of Fiction: Mrs. Bernstein.*
The scrutiny of major approaches to fiction—formal, structural, linguistic, historical, sociological—as exemplified in the work of such writers as Barthes, Booth, Lodge, Lukacs, and Watt. The reading will include two or three novels as well. Offered in 1981-82.
- 385b. *Problems in Satire: Mr. Briggs.*
A review of major developments in English satire since 1600 and simultaneously an exploration of traditional problem areas: the persona; social, moral and literary decorum; the limits of satiric metaphor and satire itself; form, mock-form and the tendency of satire to invade prevailing literary types. Major readings from Donne, Swift, Pope, Sterne, Blake, Byron and selected modern satirists. Offered in 1980-81.
- 386a. *Milton and English Literary Tradition: Mr. Briggs.*
First, an examination of the rise of Milton's critical reputation and of his influence upon selected later poets; and second, a more general exploration of the nature of literary influence and tradition. Topics for discussion will include the various aspects and designs of tradition and the intellectual perspectives and personal motives which shape its presentation. Major readings will be drawn from Addison, Pope, Jonathan Richardson, Johnson, Wordsworth, Arnold, Eliot, and several modern interpreters of tradition. Offered in 1981-82.
- 388a. *Modern Poetic Theory: Mr. Jackson.*
Theories of the Poem since Imagism and their background in the late nineteenth century. Theoretical contributions of certain philosophers—e.g., Susanne K. Langer and R. G. Collingwood—will be considered. Works by Walter Pater, Pound, Yeats, Hulme, Eliot, Williams and others will be read. Offered in 1980-81.
- 389b. *Studies in Twentieth-Century Criticism: Mr. Jackson.*
The development of major twentieth-century critical trends from nine-

teenth-century roots and the philosophical implications of various modern critical orientations. Readings drawn from Coleridge, Ruskin, Arnold, Leavis, Richards, Frye, and various structuralist and post-structuralist critics. Consult semester course list.

399. *Senior Conference:* Members of the Department.

The Senior Conference will continue for the entire year and will focus upon a core of reading, determined in advance by the two instructors for each semester. The reading will consist of substantial and significant works drawn from all periods of English and American literature, ranging from the late medieval period to the modern.

Majors in English will be expected to know the works in advance—either through course work or summer reading. The conference will consider kinds of critical approaches to these works and will demand of the students further reading, as well as responsible participation. A work may be considered in its historical context (political, philosophical, occasional background); in the context of other works by the author (for both thematic and formal comparison); in the context of other works of the same period and, for structural and generic studies, in the context of the entire spectrum of English and American literature. Concurrently the student will become acquainted with examples of practical and theoretical criticism which exemplify these various approaches.

At the end of the year the students will be examined by a committee of four members of the Department who are not involved in supervision of the conference. The student may elect either a four-hour written examination or a fifty-minute oral. The examination will allow for many kinds of exemplification as well as intelligent use of supplementary and secondary reading. The grade for the year will be determined by the Examination Committee in consultation with the conference instructors.

Honors Work:

In the senior year, Honors work, consisting of independent reading, reports and conferences, is offered to students of marked ability. Honors papers are due on the Friday two weeks before the end of classes.

Students wishing to continue work in English at Bryn Mawr in order to obtain a Master of Arts degree may, with the permission of the Department, begin research toward a Master's paper during the senior year in place of an honors unit. It is hoped that the paper can be completed, along with the required three graduate units and examination, during a year of graduate study, thereby making possible the conferral of the M.A. degree in the year following the A.B. In exceptional cases, students accelerating or transferring to Bryn Mawr who complete undergraduate requirements before the end of the senior year may petition to be admitted to graduate courses before the conferral of the A.B. degree.

Teaching Certification:

A sequence of work offered by the Department of English and the Department of Education of the College leads to a certificate to teach in the secondary schools of Pennsylvania.

Fine Art

Professor: Fritz Janschka, *Akad. Maler* (Vienna)

At Haverford:

Professor of Fine Arts: Charles Stegeman, *Académie Royale des Beaux-Arts* (Brussels)

Associate Professor of Fine Arts: R. Christopher Cairns, A.B., M.F.A.

Assistant Professor of Fine Arts: William E. Williams, A.B., M.F.A.

The major program in fine art is coordinated with, and complementary to, the fine arts major program at Haverford College, courses on either campus being offered to students of either College with the approval of the respective instructors.

The program is under the direction of the Bryn Mawr Professor of Fine Art, with whom prospective fine arts majors should plan their major curricula.

Requirements in the Major Subject: At least four units in fine art, which must include Haverford 101, one 300-level course (or an approved Haverford equivalent) and the Senior Conference. Fine art majors must also successfully take two units of allied work, of which a course in history of art must be one.

Allied Subjects: History of Art, History, classical and modern languages, Mathematics, Chemistry, Physics; others, in consultation with the Professor of Fine Art.

225. *Graphic Arts:* Mr. Janschka.

Intaglio and relief printing; etching, aquatint and soft-ground; drypoint; woodcutting and combined use of various methods. Prerequisite: Haverford Fine Arts 101 or proof of adequate previous training in drawing.

335. *Color Lithography:* Mr. Janschka.

An advanced graphic arts course with emphasis on color printing by lithographic processes. Making of editions. Prerequisites: Fine Art 225 or Haverford Fine Arts 231 or 241.

345. *Advanced Drawing:* Mr. Janschka.

Drawing as an independent art form. Line as a dominant composition

factor over color. All drawing media and watercolor, tempera and acrylic paints. Prerequisite: Haverford Fine Arts 231 or 241, or Fine Art 225.

399. *Senior Conference:*

Individual or joint approved projects pursued through the year under the direction of the Professor of Fine Art at Bryn Mawr.

403. *Supervised Project:* Members of the Department.

Permission of instructor and Department chairman required.

Final examination in the Major Subject:

1. The presentation of one portfolio of work arising from courses taken in advanced drawing and a second portfolio resulting from work in advanced courses in painting or sculpture or graphics;
2. The formal exhibition of a small selection of advanced works;
3. The presentation of work done in the Senior Conference.

Work presented in the final examination will be judged and graded by a jury consisting of the Professor of Fine Art, members of the Haverford Fine Arts faculty and a member of the History of Art Department.

COURSES AT HAVERFORD

101. *Fine Arts Foundation Program:* Members of the Department.
Drawing; Painting; Photography; Sculpture; Graphic Arts.
- 231a. *Drawing All Media:* Mr. Stegeman.
& b.
- 233a. *Painting: Materials and Techniques:* Mr. Stegeman.
& b.
- 241a. *Drawing All Media:* Mr. Cairns.
& b.
- 243a. *Sculpture: Materials and Techniques:* Mr. Cairns.
& b.
- 251a. *Photography: Materials and Techniques:* Mr. Williams.
& b.
- 333a. *Experimental Studio (Painting):* Mr. Stegeman.
& b.
- 343a. *Experimental Studio (Sculpture):* Mr. Cairns.
& b.
- 351a. *Experimental Studio (Photography):* Mr. Williams.
& b.
- 371a. *Analysis of the Visual Vocabulary: Painting and Sculpture since World War II:* Mr. Stegeman.
& b.

French

Professors: Michel Guggenheim, Ph.D.
Pauline Jones, Ph.D.†
Catherine Lafarge, Ph.D., *Chairman*
Mario Maurin, Ph.D.

Assistant Professors: Ullrich Langer, Ph.D.
Margaret Simpson Maurin, Ph.D.
Grace Armstrong Savage, Ph.D.

Lecturer: Rebecca M. Fox, M.A.

Professors of History: J. H. M. Salmon, M.Litt., Lit.D.
Alain Silvera, Ph.D.

The major in French includes work in both literature and language (track I), as well as work in French history and civilization for those who wish to offer an interdisciplinary concentration (track II). In the first year students are introduced to the study of French literature, and special attention is given to the speaking and writing of French. Second-year courses treat French literature from the beginning to the present day. In these courses, students whose command of written French is inadequate will be expected to attend regular sessions devoted to special training in writing French. A second-year half-course is devoted to advanced language training, with practice in spoken as well as in written French.

Advanced courses offer detailed study either of individual authors, genres and movements (track I) or of particular periods, themes and problems in French culture (track II). In both tracks, students are admitted to advanced literature courses after satisfactory completion of two semesters of 200-level courses in French literature. In track II, satisfactory completion of the introductory course in French civilization is a prerequisite for admission to advanced courses in French history and civilization. Alternatively, admission to these advanced courses may be granted by placement test and permission of the Department.

Students in all courses are encouraged to make use of the Language Laboratory. In French 001, 002 and 205c, the use of the Laboratory and intensive oral practice in small groups directed by a Department assistant form an integral part of the course. French majors find it valuable to supplement the work done at Bryn Mawr by study abroad either during the summer at the *Institut* in Avignon or during the sophomore or junior year. Residence in French House for at least one year is advisable.

† On leave semester II, 1980-81

H preceding a course number indicates a Haverford course.

Requirements in the Major Subject:

1) *Literature concentration:* French 101, French 205c, four semesters of 200-level literature courses, two semesters of advanced literature courses and the Senior Conference in literature.

2) *Interdisciplinary concentration:* French 101, French 205c, Civilization 290, four semesters of 200-level literature courses (or two semesters of 200-level literature courses and two semesters of advanced level literature courses), two semesters of 200-level French history courses and two semesters of advanced level French history courses (or four semesters of advanced level French history courses), and the interdisciplinary Senior Conference.

3) *Both concentrations:* Students whose preparation for college has included advanced work in language and literature may, with the consent of the Department, substitute a more advanced course for French 101. Occasionally, students may be admitted to seminars in the Graduate School. Such arrangements are made at the suggestion of the Department, with the approval of the Dean of the Graduate School of Arts and Sciences.

All French majors are expected to have acquired fluency in the French language, both written and oral. Unless specifically exempted by the Department, they are required to take French 205c.

Requirements for a French Minor: French 101, French 205c, and two second-year or advanced units in French literature. At least one-half unit must be at an advanced (300) level.

001. *Elementary French:* Members of the Department.

The speaking and understanding of French are emphasized, particularly during the first semester. The work includes regular use of the Language Laboratory and is supplemented by intensive oral practice sessions three or four times a week. The course meets five times a week.

002. *Intermediate French:* Members of the Department.

The emphasis on speaking and understanding French is continued, texts from French literature are read and short papers are written in French. Students are expected to use the Language Laboratory regularly and to attend supplementary oral practice sessions twice a week.

101. *Introduction to Literary Analysis:* Members of the Department.

Presentation of essential problems in literary analysis by close reading of works selected from various periods and genres (drama, poetry, novels and short stories). Participation in discussion and practice in written and oral expression are emphasized.

201a. *French Literature of the Seventeenth Century:* Mr. Maurin.

The course will cover representative authors and literary movements. Special attention will be given to the concepts of the Baroque, the development of Tragedy (Corneille, Racine) and the Age of Classicism. Offered in 1981-82 and alternate years.

- H201b. *The Classical Age*: Mr. Gutwirth (at Haverford). Offered in 1980-81 and alternate years.
- 201b. *French Literature of the Eighteenth Century*: Miss Lafarge.
The course will include texts representative of the Enlightenment and the Pre-Romantic movement, with emphasis upon the development of liberal thought as illustrated in the *Encyclopédie* and the works of Montesquieu, Voltaire, Diderot and Rousseau. Consult semester course list.
- 202a. *French Literature of the Nineteenth Century (Novel and Drama)*: Mr. Guggenheim, Mr. Maurin.
From Chateaubriand and Romanticism to Zola and Naturalism: a study of selected novels and plays.
- H202a. *Nineteenth Century Lyric Poetry*: Mr. Gutwirth (at Haverford).
The lyrical rebirth of the nineteenth century: Vigny, Hugo, Baudelaire, Rimbaud, Verlaine, Mallarmé. Consult semester course list.
- 202b. *French Literature of the Twentieth Century*: Mrs. Maurin.
A study of selected works illustrating the principal literary movements from the turn of the century to the present. Gide, Proust, Valéry, Claudel, Surrealism, Existentialism, the Theater of the Absurd, the New Novel.
- 203a. *French Literature of the Middle Ages*: Mrs. Savage.
A study, through selected works read in modern French versions, of the principal literary genres of medieval literature: saint's life, epic, *lai*, *roman courtois*, *fabliau*, lyric poetry, religious and secular drama, and historical chronicles. Offered in 1981-82 and alternate years.
- H203a. *The Novel from Laclos to Proust*: Mr. Cook (at Haverford).
Offered in 1980-81.
- 204a. *French Literature of the Sixteenth Century*: Mr. Langer.
A study of the development of Humanism, the concept of the Renaissance, and the Reformation. The course will focus on representative works, with special attention given to the prose of Rabelais and Montaigne, the *Conteurs*, the poetry of Marot, Scève, the *Pléiade* and d'Aubigné. Offered in 1980-81 and alternate years.
- 205c. *Stylistique et traduction*: Miss Jones, Mrs. Savage.
Intensive practice in speaking and writing. Conversation, discussion, advanced training in grammar and stylistics, translation of literary and non-literary texts and original composition. With the addition of a third hour each week, the course may be taken as either 205a and/or 205b.
- 216a. *Women in the Middle Ages*: Mr. Brand, Mrs. Savage.
(INT.) A study of the role of women in selected societies of medieval Europe. A consideration of late Roman, barbarian and early medieval women will lead to an extended analysis of the literary perception and historical activities of women in the twelfth century. The course will conclude with consideration of women's achievements in the thirteenth century. Prerequisite: French 101 or History 111 or equivalent work. Offered 1980-81 and alternate years.
- 241a. *The Impressionist Era*: Mr. McCarthy (at Haverford).
Offered on demand.

- 243b. *Contemporary France*: Mr. McCarthy (at Haverford).
Offered on demand.
290. *La Civilisation française*: Mr. Guggenheim, Mr. McCarthy (at Haverford).
(INT.) Conducted in French, this course investigates French culture and society in its historical context from the Religious Wars to de Gaulle's Republic. Pre-requisite: a good command of French.
- 295b. *Paris in the Seventeenth and Eighteenth Centuries*: Miss Lafarge.
(INT.) A study of the geography, architecture, economics, sociology and politics of Paris in these two periods. Offered in 1980-81 and alternate years.
- 297a. *L'Histoire à l'époque romantique: historiens, romanciers, auteurs dramatiques*: Mr. Salmon.
This one-semester course is concerned with the romantic vision of French history in the generation following Napoleon. It will involve study of the works of professional historians, writers of historical drama, and historical novelists. Among authors to be discussed are Guizot, Thierry, Vigny, Mérimée and Hugo. The class will be partly conducted in French. Offered in 1980-81 and alternate years.
- 301b. *La Poésie lyrique*: Mr. Langer.
The course will focus on the *poésie maniériste et baroque* of the sixteenth century and the works of Ronsard, Du Bellay and Théophile de Viau. Offered on demand.
- 302a. *Voix médiévales et échos modernes*: Mrs. Savage.
A study of selected nineteenth and twentieth-century works inspired by medieval subjects, such as the Grail and Arthurian legends or Eve-Mary typology, and by medieval genres, such as the *chanson de geste*, the saint's life, or the miracle play. Included are works by Hugo, Flaubert, Claudel, Cocteau, France, Suarès, Bonnefoy, Genevoix, Gracq, and Yourcenar. Offered on demand.
- 303a. *La Vision de la femme dans la littérature française*: Miss Lafarge.
The vision of woman in representative French authors from Christine de Pisan to Mme. de Staël. Novels, plays, essays and poems written by both men and women will be studied to illustrate the many variations of that vision during four centuries.
Offered on demand.
- 304a. *Le roman au XVIII^e siècle*: Miss Lafarge.
An in-depth study of works representative of the eighteenth-century French Novel. Special attention will be given to the memoir novel (Marivaux and Prévost), the philosophical novel (Diderot and Voltaire) and the epistolary novel (Rousseau, Laclos and Rétif de la Bretonne). Offered on demand.
- 304b. *Essayistes du XX^e siècle*: Mr. Maurin.
From Valéry to Barthes. Offered on demand.
- 305a. *Baudelaire*: Miss Jones.
A study of the *Fleurs du Mal* and the *Petits Poèmes en prose*, with emphasis upon the *modernité* of themes and techniques. Some attention will be given to the *Paradis artificiels* and a selection of Baudelaire's critical writings.

as primary sources of later definitions of the nature and function of the symbol in poetry and other arts. Offered on demand.

- 306a. *Autobiographies de Chateaubriand à Sartre*: Mr. Maurin.

The course will include texts representative of the genre such as Chateaubriand's *Mémoires d'Outre-Tombe*, Stendhal's *La Vie de Henry Brulard*, Vallès' *L'Enfant*, Colette's *Sido* and Sartre's *Les Mots*. Offered on demand.

- 306b. *Le Théâtre du vingtième siècle*: Miss Jones.

A close examination of selected works of major French dramatists from Claudel to Beckett and Genet, with emphasis on the dialectic of heroism and nihilism, tradition and revolt in the vision of the theater as art form, and innovative techniques of stagecraft. Special attention will be given to twentieth-century adaptations of Greek myths, the influence of surrealism and existentialism, *le théâtre de l'absurde*, and the diversity of the contemporary *avant-garde*. Offered on demand.

- 307a. *Ecrivains engagés de Montaigne à Sartre*: Mr. Guggenheim.

A study of the commitment to action of French authors spanning four centuries. Such crises as the Religious Wars, the persecution of Jansenism, absolute monarchy, the rise of the spirit of Enlightenment, the French Revolution, the industrial era, the Dreyfus Affair, pacifism and *Résistance* in the 1930s and 1940s will be examined through selected texts. Offered on demand.

- 308a. *Verlaine, Rimbaud*: Miss Jones.

A close study of the major works of the two poets, with special attention to their distinctive evolution, treatment of archetypal themes and images, and experiments with poetic form and language. Discussion of Verlaine and Rimbaud in the light of modern critical theory will be included in the course, but primary emphasis will be on the texts and the concept of poetry they reveal. Offered on demand.

- 309a. *Gide et Sartre*: Mr. Maurin.

A survey of representative works written by these two writers, with particular emphasis on Gide's fiction and Sartre's concept of the relationship between literature and action. Offered on demand.

- 310a. *Techniques narratives*: Mrs. Savage.

An intensive study of problems in narrative techniques as found in representative examples of romance, novel, *nouvelle*, and short story. Emphasis will be given to the handling of narrative time, to the role of the narrator, and to the fictional modes of chronical, diary, *mémoires*, and epistolary novel. Offered on demand.

- 311a. *Advanced Topics in French Literature*: Mr. McCarthy (at Haverford).
Malraux. Offered on demand.

- 311b. *Advanced Topics in French Literature*: Mr. Cook (at Haverford).
Proust. Offered on demand.

324. *Revolutionary Europe 1789-1848*: Mr. Silvera.

(INT.) The first semester will focus on topics in French Revolutionary and Napoleonic Europe. In the second semester, problems in the age of Metternich

through the revolutions of 1848, including the Industrial Revolution, nationalism, and early socialism, will be covered. Offered in 1981-82 and alternate years.

330. *France since 1870*: Mr. Silvera.

INT.) A study of the French national experience from the Paris Commune to the student revolt of 1968 with particular emphasis on institutional and intellectual developments under the Republic. Offered in 1981-82 and alternate years.

355b. *Topics in Early Modern European History: the French Revolution*:

INT.) Mr. Spielman (at Haverford). Offered on demand.

362. *France, 1559-1661*: Mr. Salmon.

INT.) The period from the religious wars to the personal rule of Louis XIV is treated as a unity in which revolutionary changes occurred in the structure of French society. These changes are examined in the light of French literature and political thought in the period. Offered in 1981-82 and alternate years.

399. *Senior Conference in Literature*: Mrs. Maurin, Mr. Guggenheim, Mrs. Savage.

A weekly seminar on representative works of French literature followed at the end of the year by an oral explication of a French literary text and a three-hour written examination. One research paper each semester.

399. *Interdisciplinary Senior Conference*: Mr. Silvera, Mr. Salmon.

A series of weekly seminars examining the relationship between literature, political theory and historiography within a selected period. Each student will undertake a special project, which will be submitted in writing and defended verbally. There will also be a three-hour written examination.

401. *Honors Work*:

On the recommendation of the Department, students in their senior year will be admitted to Honors work consisting of independent reading, conferences and a long paper.

Interdepartmental Work:

The Department of French participates in the interdepartmental majors in The Growth and Structure of Cities (see page 164) and The Romance Languages (see page 166).

Junior Year Abroad:

Students majoring in French may, by a joint recommendation of the Dean of the College and the Department of French, be allowed to spend their junior year in France under one of the junior year plans, such as those organized by Barnard and Columbia, Hamilton, Hood, Sarah Lawrence, Smith, Swarthmore and Sweet Briar Colleges, New York University, Vanderbilt University, University of Vermont or Wesleyan University.

Summer Study:

Students wishing to enroll in a summer program may apply for admission to the *Institut d'Etudes françaises d'Avignon*, held under the auspices of Bryn Mawr. The *Institut* is designed for selected undergraduates and graduate students with a serious interest in French culture, most particularly for those who anticipate professional careers requiring a knowledge of the language and civilization of France. The curriculum includes general and advanced courses in French language, literature, social sciences, history and art. The program is open to students of high academic achievement who have completed a course in French at the third-year level, or the equivalent.

Teaching Certification:

A sequence of work offered by the Department of French and the Department of Education of the College leads to a certificate to teach in the secondary schools of Pennsylvania.

Geology

Professors: Maria Luisa Crawford, Ph.D.†

Lucian B. Platt, Ph.D.

Associate Professors: William A. Crawford, Ph.D.*

William Bruce Saunders, Ph.D., *Chairman*

Lecturers: Steven R. Carson, M.A.

Alice L. Hoersch, Ph.D.

Earl Shapiro, Ph.D.

Assistants: David Coulter, B.A.

Katherine Kilduff, B.S.

Mark Steuer, M.S.

Peter Trueblood, B.A.

The Department seeks to make students more aware of the physical world around them. The subject includes a study of the materials of which the world is made, of the physical processes which have formed the earth, especially near the surface, of the history of the earth and its organisms and of the various techniques necessary to investigate earth processes and history. Geology borrows widely from its sister sciences, combining many disciplines into an attack on the problem of the earth itself. An essential part of any geologic training lies outside the classroom, in field work.

† On leave for the year 1980-81

* On leave semester I, 1980-81

Requirements in the Major Subject: Geology 101a and b, 201a and b, 202a, 204b, one advanced unit, the Senior Conference, and one full-year course in two of the following departments: Chemistry, Mathematics, Physics. Students may meet some of the major and allied requirements by advanced standing or placement examinations. A student who wishes to follow a career in geology should plan to attend a summer field course, usually following the junior year. A third course from one of the allied subjects is also strongly recommended.

Allied Subjects: Biology, Chemistry, Physics, Mathematics, Statistics; Astronomy, Anthropology, Archaeology, or Economics are accepted in special cases.

- 01a. *Physical Geology:* Members of the Department.
A study of materials and structures of the earth; surface and near-surface processes such as the action of streams, glaciers and volcanoes and of the features to which they give rise. Three lectures, three hours of laboratory or field work a week, plus a one-day field trip on a Saturday.
- 01b. *Historical Geology:* Members of the Department.
The history of the earth from its beginning and the evolution of the living forms which have populated it. Three lectures, three hours of laboratory or field work a week. A three-day field trip is taken in the spring. Prerequisite: Geology 101a or its equivalent.
- 01a. *Crystallography and Optical Mineralogy:* 1980-81, Mr. Carson; 1981-82, Mrs. Crawford, Mr. Crawford.
The study of geometrical and optical crystallography. Description of the external symmetry of crystalline solids and instruction in the use of the polarizing microscope for use in identifying minerals. Three lectures, four hours of laboratory a week.
- 01b. *Crystal Chemistry and Mineral Paragenesis:* Mr. Crawford.
Descriptive and determinative mineralogy. The relation between the physical properties of minerals and their structures and chemical composition. The occurrence and typical associations of minerals. Three lectures, four hours of laboratory a week. Prerequisite: Geology 201a.
- 02a. *Invertebrate Paleontology:* 1980-81, Mr. Shapiro; 1981-82, Mr. Saunders.
A systematic survey of animal groups in geologic time, with emphasis on their morphology, ecology and evolution. Three lectures, three hours of laboratory a week. Prerequisite: Geology 101a and b or permission of instructor.
- 04b. *Structural Geology:* Mr. Platt.
Recognition and description of deformed rocks; introduction to mechanics and patterns of deformation. Three lectures and three hours of laboratory or field work a week. Prerequisite: Geology 101a and b and Analytic Geometry or Trigonometry.
- 06b. *World Resources and International Stresses:* Mr. Platt.
The causes of the irregular distribution of fuels and some other mineral

resources are reviewed and considered as factors in industrial society. Readings from the current press and government position papers. Prerequisite: Geology 101a. Offered in 1981-82 and alternate years.

221b. *Introduction to Oceanography*: Mr. Carson.

The study of physical and chemical processes that affect the distribution of oceanic properties with some discussion of the relationship of such processes to biological activity and to man's impact and dependence on the oceans. Prerequisite: One semester of any science.

301b. *Tectonics*: Mr. Platt.

Fundamental concepts, e.g., continental drift, sea floor spreading and the origin of island arcs, mountain chains, geosynclines, oceans, continents and rift valleys in the context of earth hypotheses such as convection currents and the origin of the earth. Three lectures and three hours of laboratory or field work a week. Offered 1980-81 and in alternate years.

302b. *Advanced Paleontology*: Mr. Saunders.

Principles, theory and application of various aspects of paleontology such as evolution. Three lectures, three hours of laboratory a week (with occasional augmentation by field work). Prerequisite: Geology 202a or permission of instructor. Offered in 1980-81 and alternate years.

303a. *Thermodynamics for Geologists*: Mr. Carson.

An elementary treatment of thermodynamics and phase diagrams as applied to geological systems. The laboratory consists of determination of thermodynamic properties, phase equilibria experiments and analytical techniques. Three lectures a week. Prerequisites: Geology 101a and b, Geology 201a and b, Chemistry 101 or permission of instructor. Offered in 1980-81 and alternate years.

304. *Introduction to Petrology*: Mrs. Crawford, Mr. Crawford, Mr. Saunders.

The origin, mode of occurrence and distribution of igneous, metamorphic and sedimentary rocks. The laboratory emphasizes hand-specimen and microscopic petrography and includes some field projects. Three lectures, three hours of laboratory a week. Prerequisites: Geology 101 and 201. Offered in 1981-82 and in alternate years.

305b. *X-ray Crystallography*: Mrs. Crawford.

An introduction to the elements of x-ray crystallography including the geometry of crystals, the physics of x-rays and how x-rays interact with crystalline matter. The laboratory covers the study of powder and single crystal x-ray diffraction. Three lectures, four hours of laboratory a week. Prerequisite: any 101 science. Offered in 1981-82 and in alternate years.

306a. *Stratigraphy*: Mr. Platt.

Principles, theory, and criteria for recognition of processes of formation of sedimentary rocks. Environments of deposition, basic stratigraphic relations, and interpretations of specific lithotopes. Three lectures a week, laboratory and field trips. Prerequisite: Geology 202a or consent of the instructor. Offered in 1980-81 and alternate years.

- 7b. *Principles of Economic Geology*: Mr. Carson.
An introduction to the formation, localization and exploitation of metallic mineral deposits. Three lectures, three hours of laboratory a week. Prerequisite: Geology 101, 201 and 303a. Offered in 1980-81 and alternate years.
99. *Senior Conference* shall consist of:
1. "Topics in Geology," led by members of the Department.
2. A written report on an independent project in the field, laboratory or library.
101. *Honors Work*:
Qualified students are admitted to Honors Work on the recommendation of the Department. This consists of one unit of field or laboratory work on an independent research problem.
Selected Graduate Courses:
Certain graduate courses are open to properly trained undergraduates with the approval of the student's class dean and the Dean of The Graduate School of Arts and Sciences.

German

Professors: Hans Bänziger, Ph.D.*

Nancy C. Dorian, Ph.D.

Associate Professors: Gloria Flaherty, Ph.D.

C. Stephen Jaeger, Ph.D., *Chairman*

Assistant Professor: Susan Joan Erickson, Ph.D.†

Lecturers: Anne P. Addicks, M.A.

Linda D. Stine, Ph.D.

Assistant: Jean E. Godsall-Myers, M.A.

The purpose of the major in German is to lay the foundation for an understanding and appreciation of German culture through its literature and language. Students may elect to concentrate on the German language or on German literature during their major program. The former program includes an introduction to applied German linguistics, Middle High German and Germanic philology. The latter program concentrates on important epochs and genres of literature in the German-speaking lands. A broad base for students in both options is attained through a common core of courses. All German majors are expected to acquire fluency in the German language both written and oral. They are encouraged to gain supplemen-

*On leave semester I

†On leave for the year 1980-81

tary exposure to the German language through residence in the German House or by study abroad during the summer or the junior year or both.

The German departments of Bryn Mawr College and Haverford College cooperate to offer the widest possible range of courses to students of both colleges. Haverford German courses conducted in German are applicable to the Bryn Mawr German major.

Requirements in the Major Subject: The normal course sequence for the major is German 101, 201a or b, 202a, one other half-unit in literature at the 200 level, and at least two other units at the 300-level. The Senior Conference is also required. Special consideration is given to students who have supplemented their linguistic training as outlined above.

Allied Subjects: Any language or literature, History, Political Science, Philosophy, Music, History of Art, History of Science. While undergraduate German majors are not required to learn a foreign language besides German, the German Department urges them to do so, particularly those students who plan to continue their studies at the graduate level.

001. *Elementary German:* Members of the Department.
The course offers the foundation of the language with emphasis on the four basic skills: reading, writing, listening and speaking. Increased importance is given to reading as the course progresses.
002. *Intermediate German:* Members of the Department.
Thorough review of grammar, exercises in composition, oral practice and specially selected readings for students who have had the equivalent of two years of high school German and for those who are not adequately prepared to take German 101.
101. *Readings in German Literature:* Members of the Department.
Thorough review of grammar with continued practice in speaking and writing. Reading and discussion of selected works of German literature, including poetry, *novellas* and drama.
- 201a. *Advanced Training in the German Language:* Mr. Cary (at Haverford)
& b. and Mr. Bänziger.
First semester at Haverford. Advanced training in grammar, speaking and writing; stylistic exercises; reading of non-fictional material; oral reports and discussions; compositions.
- 202a. *Goethe and Schiller:* Miss Flaherty 1980-81, Mr. Cary (at Haverford) 1981-82.
Representative works will be read and examined closely. Special attention will be given to their historical and aesthetic backgrounds as well as to their position in the history of German literature.
- 202b. *Romanticism:* Miss Flaherty 1980-81, Mr. Cary (at Haverford) 1981-82.
A study of works by Novalis, Tieck, Kleist, Hoffman, Brentano and Eichendorff with emphasis on their relationship to the major artistic, intellectual and social trends of the time.
203. *Introduction to Modern German Literature:* Mr. Cary (at Haverford) 1980-81, Miss Erickson 1981-82.

- 50b. *Germanic Mythology*: Mr. Jaeger 1981-82.
 (INT.) The culture, religion and mythology of the Germanic peoples before and during the conversion to Christianity. Reading of the Eddas, some epics and historical sources. (In English.)
- 00b. *A Survey of German Literature*: Mr. Bänziger 1981-82.
 A course, partially in lecture form, devoted to the literary and historical background (from the Middle Ages to the present) necessary for studies in German literature. Advanced students are expected to read works of an epoch they do not yet know.
- 01a. *History of the German Language*: Miss Dorian 1981-82.
 History of the German language from its Indo-European origin to its modern dialects, with emphasis on the great "Germanizing" language changes and on archaic features which are still in evidence in modern German.
- 02b. *Vernacular Literature in Medieval Germany*: Mr. Jaeger 1980-81.
 Readings around a particular theme or in a particular genre, drawn from the rich body of Medieval German literature and considered in the European context.
- 05b. *Modern German Drama*: Mr. Bänziger 1980-81.
 Major Austrian, German, and Swiss dramatic works of the nineteenth and twentieth centuries will be considered.
- 09a. *History of the German Theater*: Miss Flaherty 1980-81.
 A study of German dramatic texts in their relationship to theatrical production from the Middle Ages to modern times.
- 10b. *Lessing and the Enlightenment*: Miss Flaherty 1981-82.
 A study of Lessing's major works and his relationship to contemporary literary, aesthetic, dramaturgical, historical and theological trends.
- 15a. *Language Learning and Teaching*: Miss Dorian 1980-81.
 (INT.) An introduction to applied linguistics, with special consideration given to topics such as: language aptitude and what it may consist of; various language teaching methodologies and their advantages and disadvantages; error analysis; first language acquisition as compared with second language acquisition; individual and societal bilingualism; bilingual education in various forms.
- 56a. *Advanced Topics in German Literature*: Mr. Cary (at Haverford) 1980-81, 1981-82. See Haverford catalogue for description.
399. *Senior Conference*: Miss Flaherty, Mr. Bänziger.
 All senior majors participate in weekly conferences on selected works, topics and problems directly related to the study of German literature, language and culture. The material covered in Senior Conference will be tested either in individual units or with a comprehensive examination.
401. *Honors Work*:
 On recommendation of the Department, students in the senior year will be admitted to Honors work consisting of independent reading, conferences and a substantial paper.

Teaching Certification:

A sequence of work offered by the Department of German and the Department of Education of the College leads to a certificate to teach in the secondary schools of Pennsylvania.

Greek

Professor: Mabel Louise Lang, Ph.D., *Chairman*

Associate Professors: Gregory W. Dickerson, Ph.D.

Richard Hamilton, Ph.D.

The courses in language and literature are designed to acquaint the students with the various aspects of ancient Greek culture through a mastery of the Greek language and a comprehension of Greek mythology, religion and the other basic forms of expression through which that culture developed. The works of poets, philosophers and historians are studied both in their historical context and in relation to subsequent Western thought.

Requirements in the Major Subject: 001, 101a, 101b or 102b, 201a and b (or their Haverford equivalents) and 301a and b. Also required is the Senior Conference at Bryn Mawr. Prospective majors in Greek are advised to take Greek 001 in the freshman year.

Allied Subjects: Ancient History, Classical Archaeology, History of Art, History of Religion, any language, Philosophy.

001. *Elementary Greek:* Miss Lang.
Semester I: elements of grammar, prose composition, readings from ancient authors and the *New Testament*. Semester II: Plato's *Apology* and *Crito*; sight readings in class from Euripides' *Alcestis*.
- 101a. *Herodotus:* Mr. Dickerson.
A book of Herodotus' *History*; prose composition is required.
- 101b. *Tragedy I:* Mr. Hamilton.
Hippolytus and *Prometheus*; a critical literary paper is required.
- 102a. *New Testament Greek:* Mr. Hamilton.
Selections from *The Gospels*, *Acts* and *Epistles*.
- 102b. *Homer:* Mr. Dickerson.
Several books of the *Odyssey* are read and verse composition is attempted. A short essay is required.
- 201a. *Plato and Thucydides:* Mr. Hamilton.
The *Symposium* and the history of the Sicilian Expedition, with required prose composition.

- 01b. *Tragedy II*: Mr. Dickerson.
Euripides' *Bacchae*, Sophocles' *Oedipus Tyrannus* and Aristotle's *Poetics*; a critical literary essay is required.
- 13a. *Myth in Practice and Theory*: Miss Lang.
- NT.) Offered on demand.
See Interdepartmental course 213.
- 14a. *Development of Greek Tragedy*: Mr. Hamilton.
Offered on demand.
- 15a. *The Ancient Stage*: Mr. Hamilton.
- NT.) Offered on demand.
The development from early Greek Tragedy through the pivotal tragi-comedies of Euripides to New Comedy and its Roman successors. Two short exercises and a critical paper are required.
- 01a. *Aeschylus and Aristophanes*: Mr. Dickerson.
Aeschylus' Agamemnon and *Aristophanes' Frogs*.
- 01b. *Hesiod and Pindar*: Mr. Hamilton.
Theogony, *Works and Days* and the odes of Pindar.
- 99a. *Senior Conference: Iliad and Oral Epic*: Miss Lang.
- 99b. *Senior Conference: Aspects of Greek Tragedy*: Mr. Dickerson.
By the end of the year all seniors doing their major work in Greek will be required to have completed satisfactorily three examinations: sight translation from Greek to English; Greek Literature and History; and either of the two special fields covered by the Senior Conference.
For work in Greek History see History 205b.
401. *Honors Work*:
Qualified students may be invited to do a unit of independent Honors work in their senior year.
Interdepartmental Work:
The Department of Greek participates in the interdepartmental majors in Classical Languages and in Classical Studies. See page 162.

History

Professors: Charles M. Brand, Ph.D., *Chairman*†

Arthur P. Dudden, Ph.D.

Mary Maples Dunn, Ph.D., *Dean of the Undergraduate College*

Elizabeth Read Foster, Ph.D.

Barbara M. Lane, Ph.D.†

J. H. M. Salmon, M.Litt., Lit.D.

Alain Silvera, Ph.D.

James Tanis, Th.D., *Director of Libraries*

Associate Professor: Phyllis S. Lachs, Ph.D.

Assistant Professors: Wendell P. Holbrook, Ph.D.

Allan Kulikoff, Ph.D.

Stephen Poppel, Ph.D.‡

Professor of Social Work and Social Research: Milton D. Speizman, Ph.D.

Professor of Greek: Mabel Lang, Ph.D.

Professor of Latin: Russell T. Scott, Ph.D.

Associate Professor of Classical and Near Eastern Archaeology:

Richard S. Ellis, Ph.D.

The history major is designed to enable the student to acquire historical perspective and historical method. Courses stress the development of ideas, cultures and institutions—political, social and economic—rather than the accumulation of data about particular events. Students study some topics and periods intensively in order to learn the use of documentary material and the evaluation of sources. Extensive reading is assigned in all courses to familiarize majors with varied kinds of historical writing and, in most courses, critical or narrative essays are required.

Requirements in the Major Subject: Students are expected to complete four units of history and two units of allied work meaningfully related to the discipline of history. The basic selection of courses is planned in the spring of the sophomore year and depends upon the special interests of each student together with the availability of courses. History 111 will ordinarily be required of all history majors, but it will not satisfy the departmental distribution requirements. A suitable distribution of work in history to be undertaken by history majors should include at least: (1) one European course, (2) one non-European course, (3) one ancient, medieval,

† On leave semester II

‡ On leave for the year 1980-81

or early modern course concentrated before 1789, (4) one modern course concentrated after 1789, (5) one and one-half 300-level courses with one half-unit at least to be taken during the senior year. A particular course may very well satisfy more than one of the above qualifications. History majors will, in addition to the foregoing requirements, participate in the Senior Conference.

Allied Work: A wide choice is open to majors in history; in general those in modern fields will find courses in the social sciences most suitable, while those in earlier periods may select, with the permission of the department concerned, courses in classical studies, in philosophy and in history of art. Intermediate or advanced courses in literature and in language may also serve to enrich the major offering.

Cooperation with Haverford College: The History departments of Haverford College and Bryn Mawr College have coordinated their course offerings. History 111 is offered jointly by members of both departments; several intermediate courses are given at one college or the other in alternate years. All courses offered by both departments are open to students of both colleges equally, subject only to the prerequisites stated by individual instructors. Both departments encourage students to avail themselves of the breadth of offerings this arrangement makes possible at both colleges.

111. *Western Civilization:* Members of the two departments.
A year course surveying Western European civilization from the fall of Rome to the present, dealing with both institutional and intellectual currents in the western tradition. Conference discussions and lectures deal with both first-hand materials and secondary historical accounts.
- 140b. *History and Principles of Quakerism:* Mr. Bronner (at Haverford).
190. *The Form of the City:* Mrs. Lane.
- (INT.) See INT. 190 in the interdepartmental major in The Growth and Structure of Cities.
- 200b. *Urban Society:* Mrs. Lane, Mr. Ross.
- (INT.) See INT. 200 in the interdepartmental major in The Growth and Structure of Cities.
- 201a. *Medieval England:* (at Haverford).
202. *American History:* Mr. Dudden, Mr. Lane (at Haverford).
The development of the American people from the colonial and national periods to the present. Offered alternately at Bryn Mawr and Haverford.
203. *Medieval European Civilization:* Mr. Brand.
Western European development from the fall of Rome to about 1350. Economic, institutional and intellectual developments in the major kingdoms of the West, and the history of the Latin Church, will be included. Offered in 1981-82 and alternate years.
- 205a. *The Ancient Near East:* Mr. Ellis.
An introduction to the history of the ancient Near East from the middle of the fourth millennium B.C. to the rise of the Persian Empire. The written

and archaeological sources, and the extent and limitations of the data, will be emphasized. Attention will focus on Mesopotamia and Egypt; the history and culture of Anatolia and Syria/Palestine will be summarized. Subjects that will be investigated include the rise of urbanism and state organization, the development and consequences of literacy, and the degree to which the contributions of different ethnic groups can be distinguished. Offered annually, except in 1980-81.

- 205b. *Ancient Greece*: Miss Lang.

A study of Greece from the Trojan War to Alexander the Great, with particular attention to the constitutional changes from monarchy through aristocracy and tyranny, to democracy in various parts of the Greek world. The stress will be on ancient sources, including historians, inscriptions, and archaeological and numismatic materials.

- 206a. *Roman History*: Mr. Scott.

A study of Rome from the Iron Age to the end of the Republic with special attention to the rise of Rome in Italy, the Hellenistic world and the evolution of the Roman state. Ancient sources, literary and archaeological, are emphasized. Offered in 1980-81 and alternate years.

- 206b. *The Roman Empire*: Mr. Scott.

Imperial history from the Principate of Augustus to the House of Constantine with particular attention to the evolution of Roman culture as presented in the surviving ancient evidence, literary and archaeological. Offered in 1981-82 and alternate years.

- 207a. *Latin America: Colonies and Revolutions*: Mrs. Dunn.

(INT.) The conquest of South America, the transplantation and modification of European institutions, and the colonial society, economy and culture will be studied, followed by the revolutionary movements and the establishment of new nations. Offered in 1981-82 and alternate years.

208. *Byzantine History*: Mr. Brand.

Political, institutional, and cultural history of the Byzantine (Later Roman) Empire from the reforms of Diocletian and conversion of Constantine to the capture of Constantinople in 1453. Contacts with Arabic, Turkish, Armenian, Slavic and West European peoples will be stressed.

209. *Early American History, 1607-1789*: Mr. Kulikoff.

An investigation of the founding of the English colonies in North America and the West Indies and their development in the seventeenth and eighteenth centuries. In the second semester, emphasis will be placed on the causes and interpretations of the Revolution, the writing and ratification of the Constitution. Offered in 1981-82 and alternate years.

210. *The Middle East*: Mr. Silvera.

A survey of the Arab world and Turkey from the rise of Islam to the Arab-Israeli wars. Among the topics to be studied in the first semester are the legacy of Islam, the rise and decline of the Umayyad and Abbasid Caliphates, and the development of Muslim society and institutions under the Ottoman Empire. The second semester concentrates on the impact of

the West and the growth of Arab nationalism. Offered in 1980-81 and alternate years.

- 211b. *Medieval Mediterranean World*: Mr. Brand.

The Mediterranean, from Islamic to Italian domination, from the tenth to the thirteenth centuries: Muslim Spain and North Africa, Norman Sicily, the Italian commercial states, the Crusades, and Islamic-Byzantine-Western relations. Offered on demand.

212. *Renaissance and Reformation*: Mr. Salmon.

The course will consider the principal intellectual and religious movements in European History against their social background from the mid-fifteenth century to the mid-seventeenth century. Offered in 1980-81 and alternate years.

- 214b. *History of Women in America*: Mrs. Dunn.

Study of roles played by and assigned to American women from the colonial period through the nineteenth century. Offered in 1980-81 and alternate years.

- 216a. *Women in the Middle Ages*: Mrs. Savage, Mr. Brand.

(INT.) A study of the role of women in selected societies of medieval Europe. A consideration of late Roman, barbarian and early medieval women will lead to an extended analysis of the literary perception and historical activities of women in the twelfth century. The course will conclude with consideration of women's achievements in the thirteenth century. Pre-requisite: French 101 or History 111 or equivalent work. Offered in 1980-81 and alternate years.

- 217a. *Topics in Cliometric History of the United States*: Mr. Weinstein (at Haverford).

225. *Europe since 1789*: Instructor at Bryn Mawr to be announced; Mrs. Gerstein, Mr. Spielman (at Haverford).

The main political, social and cultural developments of the European states since the French Revolution. Offered alternately at Bryn Mawr and Haverford.

227. *The Age of Absolutism*: Mr. Spielman (at Haverford).

230. *A History of the Afro-American People*: Mr. Holbrook.

Concentration is on the experiences, concepts, organizations and struggles of the Black people in the United States, from the commencement of the modern slave trade in the fifteenth century to the present era; attention will be given to the intertwining of this history with United States and world history. Offered in 1980-81 and alternate years.

236. *African History*: Mr. Holbrook.

A survey of African history from the iron age to the present. The focus during semester I is centered on traditional African social and political institutions, and pre-colonial economies. Studies in semester II are concentrated upon imperialist conquest, the nature and impact of the colonial experience, and independence in Africa. Offered in 1980-81 and alternate years.

- 240b. *Quakerism*: Mr. Bronner (at Haverford).
- 242b. *American Diplomacy in the Twentieth Century*: Mr. Gould (at Haverford).
244. *Russian History*: Mrs. Gerstein (at Haverford).
245. *Russian in the Twentieth Century*: Mrs. Gerstein (at Haverford).
261. *History of China*: Miss Mihelich (at Haverford).
- 272b. *Modern Jewish History*: Instructor to be announced.
- (INT.)
275. *History of American Society, 1607-1830*: Mr. Kulikoff.
During the first semester, this course will analyze the development of families, communities, and economies in early America; in the second semester, their transformation between 1780 and 1830 will be detailed. The relationships within families, between the poor and the wealthy, whites and Blacks, and between each group and the government and economy of early America will be stressed. All types of evidence, including quantitative materials, will be used. Offered in 1980-81 and alternate years.
290. *La Civilisation française*: Mr. Guggenheim, Mr. McCarthy (at Haverford).
(INT.) Conducted in French, this course investigates French culture and society in its historical context from the Ancient Régime to de Gaulle's Republic. Prerequisite: a good command of French. Offered in 1980-81 and alternate years.
- 297a. *L'Histoire à l'époque romantique: historiens, auteurs dramatiques, romanciers*: Mr. Salmon.
(INT.) This course is concerned with the romantic vision of French history in the generation following Napoleon. It will involve the study of the works of professional historians, writers of historical drama, and historical novelists. Among authors to be discussed are Guizot, Thierry, Vigny, Mérimée and Hugo. The class will be conducted partly in French. Offered in 1980-81 and alternate years.
- 300b. *The American City in the Twentieth Century*: Mr. Speizman.
(INT.) See INT. 300b in the interdepartmental major in The Growth and Structure of Cities.
- 303a. *Topics in the Recent History of the United States*: Mr. Dudden.
Franklin D. Roosevelt's New Deal.
- 303b. *Topics in the Recent History of the United States*: Mr. Dudden.
Lyndon B. Johnson's Great Society.
- 305a. *The Italian City-State in the Renaissance*: Mrs. Lane.
(INT.) The evolution of the urban civilization of Northern Italy will be examined within its socio-economic and cultural context. Florence and other major city-states will be investigated in detail. Offered on demand.
- 307b. *Medieval Cities: Islamic, Byzantine, and Western*: Mr. Brand.
(INT.) Introduction to the comparative study of economy, society, politics and culture of towns in the Islamic, Byzantine, and Western European worlds from the seventh to the thirteenth centuries. Offered on demand.
- 308a. *The Jews in the Middle Ages*: Mr. Brand.
The economic, social, and political position of the Jews in the Islamic

world, the Byzantine Empire, and Western Europe, from the seventh to the thirteenth centuries. Offered on demand.

- 315a. *Victorian and Edwardian Britain*: Mrs. Lachs.
A study of major developments in Britain from the Reform Bill of 1832 to the outbreak of World War I. The emphasis will be on social and intellectual history. Offered in 1980-81 and alternate years.
- 317a. *Mexico: Independence to the Present*: Mrs. Dunn.
(INT.) Emphasis will be placed on cultural conflict; the historical development of institutions such as church, *hacienda*, *caciquismo*; and on the nature and dynamics of the protracted revolutionary movement from Hidalgo to Cardenas. Offered on demand.
- 320a. *The Rise of the Dutch Republic*: Mr. Tanis.
The emphasis will be on politics and religion, the division between North and South, and the rise of the Northern Netherlands as an independent republic. Attention will also be given to commerce, art and culture. Offered in 1981-82 and alternate years.
- 320b. *The Golden Age of the Netherlands*: Mr. Tanis.
A study of the cultural and intellectual life of the Netherlands in the seventeenth century, emphasizing the philosophical and theological thought of the period, against a background of general economic and political considerations. Brief attention will be given to the interplay of the artistic and literary contributions of the age. Offered in 1981-82 and alternate years.
322. *Religious Forces in Colonial America*: Mr. Tanis.
Focusing on the interaction of diverse religious forces, the course will seek to relate both ecclesiastical and theological problems to the broader cultural and political context of the time. Offered in 1980-81 and alternate years.
324. *Topics in Revolutionary Europe, 1789-1848*: Mr. Silvera.
(INT.) The first semester will focus on topics in French Revolutionary and Napoleonic Europe. Problems in the age of Metternich through the revolutions of 1848, including the Industrial Revolution, nationalism and early socialism, will be covered in the second semester. Offered in 1981-82 and alternate years.
- 328b. *Colonial Towns in North and South America*: Mrs. Dunn.
(INT.) A comparative examination of origins of selected towns. Offered on demand.
330. *France since 1870*: Mr. Silvera.
(INT.) A study of the French national experience from the Paris Commune to the student revolt of 1968 with particular emphasis on institutional and intellectual developments under the Republic. Offered in 1981-82 and alternate years.
332. *The Civil War and Reconstruction*: Mr. Holbrook.
A study of the Civil War, its causes, and the period of postwar Reconstruction. Emphasis will be placed on the examination of presidential leadership, changes in social and political institutions, southern history, and the tran-

sition of Blacks from slavery to freedom. Prerequisite: Some work in American history at the college level. Offered in 1981-82 and alternate years.

335a. *A History of Blacks in the American City*: Mr. Holbrook.

(INT.) The early nineteenth-century experiences of slaves and freemen in American cities. A study of successive waves of black migrations which have contributed much to the contemporary American urban demographic pattern. Students will have the opportunity to do research and to write on the history of the black experience in Philadelphia. Offered in 1980-81 and alternate years.

335b. *West African Leadership*: Mr. Holbrook.

The course treats the themes of continuity and the patterns of change in West African leadership from the eleventh century to the present. After a study of leadership in both state and segmentary societies of pre-colonial West Africa, the course continues with readings and research focusing upon chiefs and other traditional leadership under colonialism, nationalists, parliamentary leaders, one-party systems and military rule. Offered in 1980-81 and alternate years.

340a, b. *Topics in American History*: Mr. Lane (at Haverford).

341b. *Violence in American History*: Mr. Lane (at Haverford).

345b. *Topics in American Legal History*: Mr. Stevens (at Haverford).

347b. *Topics in Far Eastern History*: Miss Mihelich (at Haverford).

351a. *The Westward Movement*: Mr. Bronner (at Haverford).

352a. *Religious Utopian Movements in the United States*: Mr. Bronner (at Haverford).

355b. *Topics in Early Modern European History*: Mr. Spielman (at Haverford).

(INT.) 356a. *Topics in Modern European History*: Mrs. Gerstein (at Haverford).

358b. *Topics in Medieval History*: Mr. McKenna (at Haverford).

360. *England under the Tudors and Stuarts*: Mrs. Foster.

A study of the life and institutions of the English people, 1509-1714. Students will make extensive use of primary source materials. Offered in 1981-82 and alternate years.

362. *France, 1559-1661*: Mr. Salmon.

(INT.) The period from the religious wars to the personal rule of Louis XIV is treated as a unity in which revolutionary changes occurred in the structure of French society. These changes are examined in the light of French literature and political thought in the period. Offered in 1981-82 and alternate years.

370b. *The Great Powers and the Middle East*: Mr. Silvera.

A study of the diplomatic and geopolitical aspects of the Eastern Question and the Great Game in Asia from Napoleon's invasion of Egypt to the 1956 Suez crisis, and including the broader issues of Western cultural penetration in the Islamic heartlands.

- 393b. *Self-Portrait of England in the Sixteenth and Seventeenth Centuries:*
(INT.) Mrs. Foster.
Self-portrait of an age. A study of British history, descriptions of England and Englishmen, social criticism, and biographical sketches. Offered in 1980-81 and alternate years.
399. *Senior Conference:* Mr. Salmon and other faculty.
A required seminar for history majors on the History and Philosophy of History.
401. *Honors Work:*
Honors work in any of the advanced fields is offered for the senior year to any history major who completes her third year with a record of distinction. An essay based on source material must be presented.
403. *Supervised Study:* Members of the Department.
Permission of instructor and department chairman required. Offered on demand.

Interdepartmental Work:

The Department of History participates in the interdepartmental major in The Growth and Structure of Cities and the concentration in Hispanic and Hispanic-American Studies. See pages 164 and 166.

Teaching Certification:

A sequence of work offered by the Department of History and the Department of Education of the College leads to a certificate to teach in the secondary schools of Pennsylvania. Current requirements call for two and one-half units of allied work in the social sciences.

History of Art

Professor: James Snyder, M.F.A., Ph.D.

Associate Professor: Dale Kinney, Ph.D., *Chairman*

Assistant Professor: Steven Z. Levine, Ph.D.

Lecturers: Betsy Rosasco, Ph.D.

Suzanne Spain, Ph.D.

Professor of Classical and Near Eastern Archaeology and of History of Art:

Phyllis Pray Bober, Ph.D.

Assistants: Linda Caron, M.A.

Perri Roberts, M.A.

The Department regularly offers an introductory course, a series of general intermediate courses and more concentrated advanced half-courses and instruction on special topics to majors in their senior year.

Requirements in the Major Subject: At least four units of course work in art history, normally including History of Art 101 and always one unit of advanced course work, together with the Senior Conference and two units of allied work. Intermediate courses with supplementary work may sometimes be counted as advanced at the discretion of the Department.

Students contemplating a major in History of Art are strongly advised to consult the Department as early as possible in their college careers, especially with regard to language preparation.

Allied Subjects: Archaeology, Greek, Latin, History, modern languages; others in consultation with the Department. Students are especially encouraged to undertake, in consultation with the Department, allied work in modern languages, which are essential for advanced work in history of art.

- 101. *Introduction to Art History:* Members of the Department.
The course is designed as an introduction to the methods and scope of history in the field of Western art from medieval to modern times.
- 210. *Byzantine Art:* Mrs. Kinney.
- 211. *Art of the Later Middle Ages:* Mr. Snyder.
- 212. *Renaissance Art:* Mrs. Bober.
- 213. *Baroque Art:* Miss Rosasco.
- 214. *Modern Art:* Mr. Levine.
- 220a. *Survey of Western Architecture:* Mrs. Kinney, Mrs. Lane.
- (INT.) See INT. 220a under Interdepartmental Courses.
- 310b. *Topics in Early Medieval Art:* Mrs. Kinney.
- 320a. *Problems in Netherlandish Art:* Mr. Snyder.
- 340a. *Problems in Renaissance and Baroque Iconography:* Miss Rosasco.
- 350a. *Topics in the History of Modern Architecture:* Mrs. Lane.
- (INT.) See INT. 350a under Interdepartmental Courses.
- 360b. *Topics in Modern Art:* Mr. Levine.
- 399. *Senior Conference:*
Members of the Department hold regular conferences with senior majors on their special subjects. The evaluation is in three parts, each of three hours:
 - 1. An examination to test knowledge of works of art
 - 2. A general examination on the history of art
 - 3. An examination on a special topic
- Honors Work:*
Offered to students on invitation of the Department.

History of Religion

Professor: Samuel Tobias Lachs, Ph.D., D.D., *Chairman*

Visiting Lecturers: David Rabi, Ph.D.

Patrick Henry, Ph.D.#

Laurence J. Silberstein, Ph.D.

Director of Libraries and Professor of History: James Tanis, Th.D.

A major program in history of religion is offered at Bryn Mawr, and a major in religion at Haverford. The history of religion major concentrates on the historical study of the religious traditions which have contributed most to shaping the culture of the West: Judaism and Christianity. The student is expected to achieve facility in critical analysis of the primary sources of these traditions and in tracing their development against the background of the cultural situations in which they arose and matured.

Requirements in the Major Subject: Four full courses in history of religion, of which at least one must be in a tradition other than that of the student's concentration. The Senior Conference is also required.

The normal pattern for the major consists of one introductory course (100 level), two intermediate courses (200 level) and two advanced half-courses or a full-year course (300 level). Students in advanced courses who are majoring in history of religion are required to demonstrate a working knowledge of the language appropriate to their field of concentration: Hebrew for Biblical or Rabbinic Judaism, Greek for New Testament or Early Christianity, Latin for medieval Christianity, German for the Reformed period.

Allied Subjects: Latin and Greek, Philosophy, History, Archaeology, Anthropology.

LANGUAGE COURSES

001. *Elementary Hebrew:* Mr. Rabi.
Grammar, composition and conversation with primary emphasis on fluency in reading. Course designed for preparation in reading classical religious texts.
101. *Readings in the Hebrew Bible:* Mr. Rabi.
Readings in prose of Genesis. Course will include Hebrew composition, grammar, and conversation based on the Hebrew text.
- 02b. *Readings in Rabbinic Literature:* Mr. Lachs.
- 03a. *Readings in the Hebrew Bible:* Mr. Rabi.
Jeremiah. Offered in 1980-81.
The Former Prophets. Offered in 1981-82. This course may be repeated for credit.

#Under the program for faculty exchange with Swarthmore College.

- 204b. *Readings in Post-Biblical Hebrew: Aggadah*: Mr. Rabi.
This course may be repeated for credit.
- 213a. *Readings in the Greek New Testament*.
See Greek 102a.
403. *Tutorial in Semitic Languages: Arabic*: Mr. Rabi.
Open only to students enrolled in 101 or 203.

HISTORY OF RELIGION COURSES

- 103a. *History and Literature of the Bible*: Mr. Lachs.
A study of the history of Israel and its sacred literature against the background of the ancient Near East, the development of the legal, prophetic and wisdom traditions.
- 104a. *History and Literature of Judaism*: Mr. Lachs.
& b. a. Historical study of Judaism from the Exile through the Geonic period, with major focus on the literature.
b. Modern movements from the French Revolution to the present.
- 201a. *Topics in Biblical Literature*: Mr. Lachs.
1980-81: Apocrypha and Pseudepigrapha.
1981-82: Wisdom Literature.
- 210b. *Jewish Ethics and Theology*: Mr. Lachs.
- 212a. *Seminar-Christianity and Classical Culture*: Mr. Henry.
A study of the development of Christian thought and institutions to the fifth century in the context of Graeco-Roman religion and society. Offered in 1980-81.
- 272b. *Topics in Modern Jewish History: 1980-81, Judaism and Nationalism*: (INT.) Mr. Silberstein.
- 300b. *Studies in Early Rabbinic and Medieval Judaism*: Mr. Lachs.
Topic for 1980-81: *Medieval Jewish Thought*.
Topic for 1981-82: *Jewish Sects and Institutions at the Beginning of the Christian Era*. This course may be repeated for credit.
399. *Senior Conference*: Mr. Lachs.
Consists of a year-long seminar in which the students will be introduced to the major literary materials, secondary sources, reference works and critical issues in the literature of Judaism and Early Christianity during the period approximately 200 B.C. to 200 A.D. In the second semester the students will present to the seminar a report on some theme or problem on which they will have conducted research, based on their ability to handle one or many primary sources in the original language.

COURSES GIVEN IN THE HISTORY DEPARTMENT

- 308a. *The Jews in the Middle Ages*: Mr. Brand.
- 320a. *The Rise of the Dutch Republic*: Mr. Tanis.

COURSE IN THE SOCIOLOGY DEPARTMENT

- 209b. *Sociology of Religion*: Mrs. Porter.

Italian

Associate Professors: Nancy Dersofi, Ph.D.

Nicholas Patruno, Ph.D., *Chairman*

The aims of the major are to acquire a knowledge of the Italian language and literature and an understanding of Italian culture and its contribution to Western civilization. Majors in Italian are urged to spend the junior year in Italy or to study in an approved summer school in Italy or in the United States, and they are also encouraged to take advantage of the facilities offered by Italian House.

Requirements in the Major Subject: Italian 101 or 102a, 201a, 201b, 301a, 303a and b and at least two other advanced courses. For students who enter the College with Italian, proper substitutions will be made. In all courses students are urged to use tapes available in the Language Laboratory.

Allied Subjects: Any other language or literature, Archaeology, History, History of Art, Philosophy, Music, Political Science; with departmental approval, any other field allied to the student's special interests.

001. *Italian Language:* Mr. Patruno, Miss Dersofi.
A practical knowledge of the language is acquired through hearing, speaking, writing and reading, going from concrete situations to the expression of abstract ideas and with a gradual introduction to the reading of Italian literature.
001. *Intermediate Course in the Italian Language:* Miss Dersofi, Mr. Patruno.
Intensive grammar review, readings from selected Italian authors and topics assigned for composition and discussion. Conducted entirely in Italian.
- 02a. *Stylistics & Expression:* Mr. Patruno.
Intensive work in composition and critical examination of literary texts. Prerequisite: permission of the Department, sometimes determined by a brief written examination. This course is recommended for students who wish to continue work in Italian literature.
- 01b. *Novel and Poetry of Modern Italy:* Mr. Patruno.
A study of the artistic and cultural developments of pre-Fascist, Fascist and post-Fascist Italy seen through the works of poets such as Ungaretti, Montale and Quasimodo and through the novels of Pirandello, Moravia, Silone, Vittorini, Pavese, Ginzburg and others. Offered in 1981-82 and alternate years.
- 04a. *Foscolo, Leopardi and Manzoni:* Mr. Patruno.
A study of the Italian Romantic movement as reflected in these writers.

- 204b. *Literature of the Nineteenth Century*: Mr. Patruno.
A study of the literary currents following the Romantic movement. Special attention given to *Decadentismo* and *Verismo*.
- 207a. *Dante in Translation*: Mr. Patruno.
An historical appraisal and a critical appreciation of the *Divine Comedy* with some attention given to some of Dante's other works. Offered in 1980-81 and alternate years.
- 207b. *Petrarch and Boccaccio in Translation*: Mr. Patruno.
A critical study of Petrarch's *Canzoniere* and Boccaccio's *Decameron* as examples of a changing society. Offered in 1980-81 and alternate years.
- 301a. *Dante*: Miss Dersofi.
Principal emphasis on the *Divina Commedia*. Some attention given to Dante's minor works and to literary currents of the Middle Ages. Offered in 1980-81 and alternate years.
- 303a. *Petrarca, Boccaccio and the Early Humanists*: Miss Dersofi.
Offered in 1981-82 and alternate years.
- 303b. *Literature of the Italian Renaissance*: Miss Dersofi.
Selected readings from the works of Poliziano, Lorenzo de' Medici, Castiglione, Machiavelli and Tasso. Special attention will be given to comedy and Ariosto's *Orlando furioso*. Offered in 1981-82 and alternate years.
- 305a. *Arcadia and Enlightenment*: Miss Dersofi.
Offered on demand.
- 305b. *History of the Italian Theater*: Miss Dersofi.
A study of the Italian theatre from the Renaissance to modern times. Offered on demand.
399. *Senior Conference*:
In the first semester there will be weekly meetings devoted to the study of special topics in Italian literature chosen by the students, evaluated by an oral examination in January. In the second semester each senior will prepare under the direction of the instructor a paper on an author or a theme which she has chosen. At the end of the year students must demonstrate knowledge of the development of Italian literature by either an oral or written examination, according to their preference.
401. *Honors Work*:
On the recommendation of the Department a student may undertake Honors work in Italian. Students work in a special field adapted to their interest under the direction of the Department.

Latin

Professors: Russell T. Scott, Ph.D., *Chairman*
Myra L. Uhlfelder, Ph.D.

Associate Professor: Julia H. Gaisser, Ph.D.

Lecturer: Gloria F. Pinney, Ph.D.

The major in Latin is planned to acquaint the student with the world of the Romans and their contribution to the modern world.

Requirements in the Major Subject: Latin 101a and b, 201a and b, or a combination with 202a or b, 301a and b or 302a and b and the Senior Conference. 203a is a prerequisite for Honors work and required for those who plan to teach.

Equivalent courses at the elementary 101 and 201 levels are available at Haverford.

Courses taken at the Intercollegiate Center for Classical Studies in Rome (see page 55) are accepted as part of the major. For non-majors, Latin 201a and b are prerequisites for 300-level courses.

Allied Subjects: Greek, Hebrew, History, Classical and Near Eastern Archaeology, History of Art, History of Religion, Linguistics, Philosophy, Anthropology, any modern language or literature.

001. *Elementary Latin:* Mrs. Gaisser, Mr. Scott, Miss Uhlfelder.
Basic grammar and composition, reading in classical prose and poetry.
002. *Intermediate Latin:* Mrs. Gaisser, Mr. Scott, Miss Uhlfelder.
Review of grammar with reading in prose and poetry for students who have had two years of Latin in school or do not feel adequately prepared to take Latin 101.
- 01a. *Latin Literature:* Mrs. Pinney, Miss Uhlfelder.
Selections from Catullus' poems, Vergil's *Eclogues* and readings in prose. Prerequisite: more than two years of Latin in school, Latin 001 or Latin 002.
- 01b. *Latin Literature:* Mrs. Pinney, Miss Uhlfelder.
Selections from Livy, Book I, and from Horace's *Odes*.
- 01a. *Horace and Satire:* Mrs. Gaisser, Miss Uhlfelder.
Selections from Horace's *Satires* and *Epistles*, the works of Petronius and Juvenal.
- 01b. *Latin Literature of the Silver Age:* Mrs. Gaisser, Miss Uhlfelder.
Readings from major authors of the first and second centuries A.D.
- 02a. *Medieval Latin Literature:* Miss Uhlfelder.
- 02b. Selected works of Latin prose and poetry from the late Roman Empire through the twelfth century.

- 203a. *Latin Style*: Members of the Department.
A study of Latin prose style, based on reading of prose authors and exercises in composition, and of Latin metrics with practice in reading aloud.
- 204a. *The Ancient City*: Mr. Scott.
(INT.) Offered on demand.
- 215a. *The Ancient Stage*: Mr. Hamilton.
(INT.)
- 301a. *Livy and Tacitus*: Mr. Scott.
- 301b. *Vergil's Aeneid*: Mrs. Gaisser.
- 302a. *Lucretius*: Miss Uhlfelder.
- 302b. *Cicero and Caesar*: Mr. Scott.
For Roman history, see History 206a and b.
For Roman architecture, see Classical and Near Eastern Archaeology 302b (INT.).
399. *Senior Conference*:
Regular meetings with members of the Department to discuss reading in Latin literature are intended to supplement and synthesize work done in courses. The method of evaluating the work of the conference is determined each year. Majors must pass an examination in Latin sight translation which will be offered in September, February and May.
401. *Honors Work*:
Honors work is offered to qualified students in classical or Medieval Latin literature or in Roman history. The results will be presented in a paper directed by a member of the Department.

Interdepartmental Work:

The Department of Latin participates in the interdepartmental majors in Classical Languages, Classical Studies and The Growth and Structure of Cities. See pages 162 and 164.

Teaching Certification:

A sequence of work offered by the Department of Latin and the Department of Education of the College leads to a certificate to teach in the secondary schools of Pennsylvania.

Mathematics

Professors: Frederic Cunningham, Jr., Ph.D., *Chairman*
Mario Martelli, Ph.D.

Assistant Professor: Rhonda J. Hughes, Ph.D.

Instructor: Anne C. Solderitsch, M.S.

The major in mathematics is designed to provide a balanced introduction to the subject, emphasizing its nature both as a deductive and as an applied science, at the same time providing the technical foundation for more advanced study.

Requirements in the Major Subject: at least five and one-half units including Mathematics 101, 102, 201, 202, 301, 303a, or the equivalent, and 399, Senior Conference.

Allied Subjects: Chemistry, Economics, Philosophy, Physics, Psychology.

002a. *Precalculus:* Mrs. Hughes.

A preparatory course for students with mathematical deficiencies, as preparation for 100-level courses, especially calculus. Review of algebra; trigonometry, functions, graphing. This course cannot be counted towards the Language/Mathematics requirement, or for a major or minor in Mathematics.

01a. *Calculus, with Analytic Geometry:* Members of the Department.

or b. Differentiation and integration of algebraic and elementary transcendental functions, with the necessary elements of analytic geometry and trigonometry; the fundamental theorem, its role in theory and applications.

02b. *Calculus, with Analytic Geometry:* Members of the Department.

Continuation of 101a.

03b. *Methods and Models:* Mr. Cunningham.

Mathematical concepts, notations and methods commonly used in the social, behavioral and biological sciences, with emphasis on manipulative skills and problem solving.

01a. *Intermediate Calculus and Linear Algebra:* Mr. Cunningham.

Vectors, matrices and linear maps, functions of several variables, partial derivatives, multiple integrals.

02b. *Intermediate Calculus and Linear Algebra:* Mr. Cunningham.

Line integrals, vector analysis, infinite series, Taylor's theorem, differential equations.

301. *Advanced Calculus:* Mrs. Hughes.

The classical theory of real functions, based on a construction of the real number system; elements of set theory and topology; analysis of Riemann integral, power series, Fourier series and other limit processes. Prerequisite: Mathematics 202b.

- 303a. *Introduction to Abstract Algebra*: Mr. Cunningham.
Groups, rings and fields and their morphisms. Prerequisite: Mathematics 201a or b.
- 303b. *Topics in Algebra*: Mr. Cunningham.
- 399. *Senior Conference*: Mr. Martelli.
Selected topics from various branches of mathematics are studied by means of oral presentations and the solution and discussion of problems.

In addition to the courses listed above, which are offered every year, one or more courses selected from the following list will be offered each year, depending on the needs and interests of students and faculty. In both lists, the names of faculty members attached to courses are for 1980-81, and may change from year to year.

- 204a. *Theory of Probability with Applications*: Mr. Martelli.
- 307a. *Game Theory*.
- 308. *Introduction to Applied Mathematics*.
- 309b. *Dynamical Systems*.
- 310. *Theory of Functions of a Complex Variable*.
- 311b. *Differential Equations*: Mr. Martelli.
- 312. *Topology*.
- 317. *Numerical Analysis*.
- 320. *Real Analysis*.
- 401. *Honors Work*:
Qualified students are admitted to Honors work on recommendation of the Department.
Teaching Certification:
A sequence of work offered by the Department of Mathematics and the Department of Education of the College leads to a certificate to teach in the secondary schools of Pennsylvania.

Music

AT BRYN MAWR COLLEGE

Professor: Isabelle Cazeaux, Ph.D., Chairman

Director of the Haverford-Bryn Mawr Orchestral/Choral Program:
Tamara Brooks, M.S.†

The major in music is offered at Haverford. Its requirements are described in the next section. Bryn Mawr offers the following courses in the history of music, and grants elective credit for a year of voice or instrument lessons (see course 403, below).

- 201. *Romantic Music*: Miss Cazeaux.
An historical study of nineteenth-century music; its "romantic" sources in the late eighteenth century and prolongations into the twentieth. Offered in 1980-81 and alternate years.
- 302a. *Medieval and Early Renaissance Music*: Miss Cazeaux.
An historical study of sacred and secular monophony and polyphony to ca. 1521. Offered in 1981-82 and alternate years.
- 302b. *Late Renaissance and Baroque Music*: Miss Cazeaux.
An historical study of vocal and instrumental music from the early sixteenth century to the mid-eighteenth. Offered in 1981-82 and alternate years.
- 306b. *Opera and Music Drama*: Miss Cazeaux.
An historical study of music in drama from the Middle Ages to our time. Consult semester course list.
- 307a. *Musical Criticism*: Miss Cazeaux.
An historical study of writings about music from Plato to the twentieth century, including various views on principles and problems of musical judgment, with practical exercises in journalistic and other types of criticism.
- 310a. *Bibliography and Research in Music*: Miss Cazeaux.
A study of books and book production with particular attention to reference and research materials in music. Help will be given with research methods suitable for individual projects.
- 403. *Voice or Instrument*.
Students who are sufficiently advanced and who have completed at least one year of voice or music lessons while at the College may with the ap-

† On leave for the year 1980-81

proval of the Department of Music offer for one unit of academic credit a year of voice or instrument lessons. The unit will include the lessons and also a recital or proficiency test arranged by the Music Department.

The following organizations are open to students of both Colleges. For academic credit, see Music at Haverford (below).

The Haverford-Bryn Mawr Chamber Orchestra is a small orchestra open by audition to members of the colleges and the surrounding community. Repertory includes standard and contemporary works; performances are given several times per year on both campuses.

The Haverford-Bryn Mawr Chamber Singers is a small auditioned chorus which performs works from all periods, both *a cappella* and with orchestra, with emphasis on difficult and little-known pieces. Performances are given on and off campus several times a semester.

The Haverford-Bryn Mawr Chorale, directed by Tamara Brooks, is a larger auditioned chorus open to the community as well as the colleges. Major concerts are given every year with orchestra on both campuses.

The Renaissance Choir. Members of the colleges who are confident sight-readers have the opportunity to perform *a cappella* music with one or two singers per voice part.

The Wind Ensemble is open to all wind players from the colleges and the community. Emphasis is placed on the improvement of technique, articulation, sound quality and the exploration of the existing literature for winds.

The Ensemble Groups are organized through the Haverford Chamber Music Program, Sylvia Glickman, coach. Students and faculty are afforded the opportunity of studying chamber music and the experience of performing in recitals.

Music

AT HAVERFORD COLLEGE

*Professors: Tamara Brooks, M.S., Director of the Haverford-Bryn Mawr
Orchestral/Choral Program†*

John H. Davison, Ph.D., Chairman

*Associate Professors: Sylvia F. Glickman, M.Sc., L.R.A.M., Director of
the Haverford Chamber Music Program*

Temple Painter, B. Mus.

Assistant Professor: Richard C. Brodhead, M.A.

RESIDENT CHAMBER MUSICIANS:

Joseph de Pasquale

William de Pasquale

Robert de Pasquale

Sylvia F. Glickman

George Harpham

The program in music is designed to develop the skills needed to increase an understanding of musical forms and their historical framework. A major in music provides the foundation for further study leading to a career in music; it can take many forms but, whatever the particular project, the interaction of theory-composition, music history and performance is stressed. Students may design special projects based on individual needs in consultation with departmental advisers.

The theory program includes composition at all levels and stresses the formation of a strong technique based on knowledge of the great styles of the past, which often lead to experimentation with various twentieth century styles, including jazz. Placement in theory courses is determined by a diagnostic test given at the beginning of the semester. Concerts of student compositions are given each year.

The music history program is designed to provide both a comprehensive view of western music history and the basic tools for research. Music history seminars provide detailed examinations of specific topics.

Performance ensembles, consisting of auditioned members of the College and surrounding community, include the Haverford-Bryn Mawr Chamber Orchestra, Chamber Singers, Chorale, Wind Ensemble and the Haverford Chamber Music Program. Students may participate in some of these for credit in Music 214c, 215c, and 216c. These ensembles present, on campus and on tour, a variety of new and old music including some of the

† On leave for the year 1980-81

masterpieces of the literature. Faculty and student composers' concerts, concerts by the Resident Chamber Musicians, visiting artists invited under the auspices of the Distinguished Visitors Program and the Bryn Mawr Friends of Music and the Performing Arts, and student jazz and progressive rock groups further enrich the active campus musical life. During 1979-80 the Department sponsored over 50 concerts.

Haverford encourages and gives credit for private vocal and instrumental study with the many excellent instructors to be found in the Philadelphia area.

Major Requirements: Theory-composition—203a, 204b, 303a, 304b, 205a or b, or equivalent. History—four of the following: 221a, 222b, 321a, 322b, 421a; with the adviser's consent, a topics course (224a, b and 324a, b) and 226b may be substituted for a history course in the same era. (Students planning to attend graduate school are advised to take the normal sequence.) Performance—one of the following: 214c, 215c, 216c. With departmental approval, participation in a jazz ensemble may satisfy the performance requirement. In addition, all majors are expected to recognize aurally a list of important works of the literature, of which the majority are covered in the core sequence.

Requirements for Honors: Permission to stand for Honors is granted by the Department in the first semester of the senior year. Students wishing to apply for Honors must have a superior record in all courses required for the major and must submit a proposal for a specific honors project by October 1 of the senior year.

THEORY AND COMPOSITION

- 103a, b. *Rudiments of Music:* Mr. Davison.
Study of notation and visual recognition in treble, bass and alto clefs, of scales, modes, intervals, meters and chords built in thirds, fourths and fifths; intensive ear-training and elementary piano skills. Enrollment limited to 20.
- 203a. *Elementary Theory:* Mr. Brodhead.
& 204b. Melody, scales, intervals, chords, meter and rhythm; counterpoint in two and three parts, harmony in four parts and analysis. Ear-training laboratory: work in the aural, visual, singing and written aspects of all harmonic, melodic and rhythmic materials covered in class. Five class hours and one laboratory period. Prerequisite: Music 103a or b or equivalent. Enrollment limited to 25.
- 205a, b. *Keyboard Studies:* Mrs. Glickman, Mr. Painter.
For students with virtually no keyboard experience. Practical application of material studied in 203a or 204b; piano technique, keyboard harmony, sight reading and harmonic analysis based on Baroque, Classical, Romantic and twentieth century masterpieces.

- 303a. *Advanced Theory and Composition*: Mr. Brodhead, Mr. Painter.
- 304b. A continuation of Music 203a, 204b. First semester: fugue and strict counterpoint as exemplified in the vocal style of the 16th century. Second semester: composition in the chorale-prelude, suite and sonatina forms for performance at departmental concerts. Ear-training laboratory: further work in aural and visual perception; sight-reading additional clefs; principles of transposition. Three class hours and one laboratory period. Prerequisite: Music 203a, 204b and 205a or b.
- 305b. *Advanced Keyboard Studies and Score Reading*: Members of the Department.
Emphasis on sight reading in three or four clefs, harmonic reduction from piano score, score reading, improvisation, figured bass, modulation and transposition. Not offered in 1980-81.
- 403a. *Seminar in Twentieth Century Theory and Practice*: Mr. Davison.
Practical emphasis upon composition for various instrumental combinations and analysis of works of representative composers such as Hindemith, Schönberg and Bartók. Prerequisite: Music 304b.
- 404b. *Seminar in Twentieth Century Composition*: Members of the Department.
Work with expanded tonal structure and problems inherent in the adaptation of traditional forms to twentieth century idioms. Prerequisite: Music 304b.
- 480a, f. *Independent Study*: Members of the Department.
Consent of the instructor.

PERFORMANCE

- 118f, 217f, 218f, 317f, 318f, 417a, 418b: *Vocal or Instrumental Private Study*
Prerequisites: Music 103a or b or Music 121a or b, which may be taken concurrently with the private study; departmental audition to determine level; departmental approval of the proposed teacher.

Vocal students must be in Chamber Singers, Chorale or Chamber Music; instrumentalists must be in Chamber Orchestra, Wind Ensemble, Chamber Music or a chorus. With departmental approval, jazz ensembles may meet the ensemble requirement. Special arrangements may be needed for pianists. Each student must perform for a faculty jury or in a solo or chamber performance at which two or more department faculty are present. Students and teachers will submit written evaluations at the end of the semester. Grades, given at the 200-400 level, will be determined on the basis of all available material. Full credit is automatically given at the 400 level only; requests for full credit at the 100-300 level will be considered by the Department. A maximum of two credits of private study may be applied toward graduation. All financial arrangements are the student's responsibility. Expenses of music majors may be partially subsidized by the College when funds are available.

- 214c. *Seminar in Analysis and Performance of Choral Literature*: Members of the Department.
Haverford-Bryn Mawr Chamber Singers
Score-reading, analysis and research into the musical/historical context of standard and contemporary works performed in the semester; rehearsal hours apply this study to performance; three on-campus performances per semester. Prerequisite: audition and consent of the instructor; enrollment limited to a balanced chorus of 40.
- 215c. *Seminar in Analysis and Performance of Chamber Music*: Mrs. Glickman.
Haverford Chamber Music Program
Exploration of ensemble playing in small groups; score analysis, historical and interpretative reading and practical application of performance principles through rehearsal and private chamber music coaching; public performance required. Prerequisite: audition and consent of the instructor.
- 216c. *Seminar in Analysis and Performance of Orchestral Literature*: Members of the Department.
Haverford-Bryn Mawr Chamber Orchestra
Score-reading, analysis and research into the musical/historical context of standard and contemporary works performed in the semester; rehearsal hours apply that study to performance. Prerequisite: audition and consent of the instructor; enrollment limited to instrumentalists required for the year's repertory.

HISTORY

- 121a, b. *Survey of Music History*: Mr. Davison and members of the Department.
(Also called General Programs 121a, b)
An historical survey of the development of musical thought from the plain-song era to contemporary idioms. Not offered semester I, 1980-81.
- 126b. *Introduction to the History of Jazz*: Members of the Department.
An historical survey of the origins, phases and recent directions of jazz as the most significant area of Afro-American music; visiting lecturers. Offered in 1981-82 and alternate years.
- 221a. *Classical Music*: Members of the Department.
An examination of the music of the Classical period emphasizing study of techniques and styles, performance practice and historical setting; extensive research and listening assignments. Prerequisite: Music 103a or b or equivalent.
- 222b. *Romantic Music*: Members of the Department.
An examination of the music of the Romantic period emphasizing study of techniques and styles, performance practice and historical setting; extensive research and listening assignments. Prerequisite: Music 103a or b or equivalent.
- 224a. *Seminar in Music History*: Mr. Davison.
Topic for 1980-81: The English-American Musical Lyric: its Music.
The musical structure of ballads and folk-songs with English texts, with

instruction in basic scales and composition of melody; the music of English madrigals, ayres, and songs of the sixteenth and seventeenth centuries; the eighteenth-century American folk hymn and anthem; twentieth-century art song and aspects of opera and musical theatre; the musical structure of blues and jazz song. Prerequisite: Music 103a or b or equivalent.

226b. *Seminar in Jazz History*: Members of the Department.

An intensive study of certain later jazz artists such as John Coltrane and Ornette Coleman, with special emphasis on student projects and reports. Prerequisite: Music 126b or 203a, or some practical jazz experience; enrollment limited to 24. Offered in 1980-81 and alternate years.

321a. *Baroque Music*: Members of the Department.

An examination of the music of the Baroque period emphasizing study of techniques and styles, performance practice and historical setting; extensive research and listening assignments. Prerequisite: Music 103a or b or equivalent.

322b. *Medieval and Renaissance Music*: Members of the Department.

An examination of the music of the medieval and Renaissance periods emphasizing study of techniques and styles, performance practice and historical setting; extensive research and listening assignments. Prerequisite: Music 103a or b.

a, b. *Seminar in Music History*: Members of the Department.

Topic to be announced. Prerequisite: Music 103a or b or equivalent.

421a. *Contemporary Music*:

An examination of contemporary music emphasizing study of techniques and styles, performance practice and historical setting; extensive research and listening assignments. Prerequisite: Music 203a or 204b or equivalent.

0a, f. *Independent Study*: Members of the Department.

Prerequisite: consent of the instructor.

Philosophy

President of the College: Mary Patterson McPherson, Ph.D.

Professors: José María Ferrater Mora, *Lic. Fil.*

George L. Kline, Ph.D., *Chairman*

Jean A. Potter, Ph.D.†

Associate Professors: Michael Krausz, Ph.D.

George E. Weaver, Jr., Ph.D.

Assistant Professors: Robert J. Dostal, Ph.D.

Richard Gaskins, Ph.D., J.D.

Lecturers: Margaret M. Healy, Ph.D., *Treasurer of the College*

Thomas Song, M.A., M.A.L.S., *Associate Director of Libraries*

Visiting Lecturer, semester II, 1980-81: Charles Raff, Ph.D.

Assistant: Martha Phillips, M.A.

Associate Professor of Political Science: Stephen Salkever, Ph.D.

The philosophy curriculum is organized into four divisions: Core, Metaphysics-Epistemology, Value Theory, and Persons-Periods. Courses in the Core Division are intended to provide students with a common background in philosophical problems, concepts and argumentation. Broadly, the Metaphysics-Epistemology Division is concerned with what there is and the basis for our knowledge; the Value Theory Division is concerned with the nature of evaluative concepts such as goodness and beauty and the justification for claims involving these concepts; the Persons-Periods Division is concerned with significant individual thinkers and traditions in the history of philosophy.

Intermediate-level courses in these divisions are intended to acquaint the student with the major areas of philosophical study both past and present and to provide a foundation for more advanced study. Advanced-level courses in these divisions are intended to provide the student with the means of integrating philosophy with her other studies and the opportunity for more intensive study in those areas of particular interest.

Both the division and level of a course can be determined from its three-digit course number. The first digit indicates level: 1 designates introductory; 2, intermediate, and 3, advanced. The second digit indicates the division: 0 designates the Core Division; 1, the Metaphysics-Epistemology Division; 2, the Value Theory Division, and 3 the Persons-Periods Division.

† On leave semester II, 1980-81

Division 0: (Core): Greek philosophy, problems in philosophy, logic, modern philosophy.

Division 1: (Epistemology-Metaphysics): epistemology, metaphysics, intermediate logic, philosophy of science, philosophy of religion, philosophy of history, analytic philosophy, existentialism, philosophy of time, history and philosophy of mathematics, philosophy of language, philosophy of social science, philosophy of creativity.

Division 2: (Value Theory): ethics, aesthetics.

Division 3: (Persons-Periods): Plato, Aristotle, Medieval Philosophy, Kant, Hegel, texts in Medieval Philosophy, Russian Philosophy, varieties of Russian Marxism, British Idealism.

Prerequisites: No introductory-level course carries a prerequisite. However, all courses on both the intermediate and advanced levels carry prerequisites. Unless stated otherwise in the course description, any introductory course satisfies the prerequisite for an intermediate-level course and any intermediate course satisfies the prerequisite for an advanced-level course.

Requirements in the Major Subject: Each student majoring in philosophy must take a minimum of four units of course work and the Senior Conference. The courses which the student must take are: (1) either Greek philosophy (101a or b) and modern philosophy (201b) or history of Western thought (100a and b); (2) logic (103a); (3) one half-unit of course work from each of divisions 1, 2 and 3; (4) one unit of advanced-level work. Any advanced-level course or courses may be taken to satisfy either requirement (3) or (4) above.

Courses in Philosophy at Haverford College: Students may take for credit toward the major any course taught by members of the Haverford Philosophy Department.

Courses in Political Science: Political Science 209b, *Western Political Theory (Ancient and Early Modern)*, Political Science 231a, *Western Political Theory (Modern)*, and Political Science 327a, *Political Philosophy in the Twentieth Century*, may be taken for major credit in philosophy.

Allied Subjects: Biology, Chemistry, Economics, English, History, History of Art, Mathematics, Music, Physics, Political Science, Psychology, classical and modern literatures and certain courses in Anthropology, History of Religion and Sociology.

100a. *Introduction to Philosophy: History of Western Thought:* Mr. Ferrater Mora.

The continuity of the philosophical tradition from ancient Greece to the Middle Ages, with emphasis on the relation between philosophy and its religious, political, and artistic backgrounds. Offered in 1980-81.

100b. *Introduction to Philosophy: History of Western Thought:* Mr. Ferrater Mora.

The continuity of the philosophical tradition from the end of the Middle

Ages to the present time, with emphasis on the relation between philosophy and its scientific, religious and political backgrounds. Offered in 1980-81.

- 101a. *Introduction to Philosophy: Greek Philosophy*: Members of the Department.

The origins and development of Greek philosophy, including the pre-Socratics, Plato and Aristotle.

- 101b. *Repeat of course 101a.*

- 102a. *Introduction to Problems in Philosophy*: Mr. Krausz.

A critical examination of such problems as the nature of knowledge; fact and value; freedom and determinism; rationality and irrationality; and the existence of God. Readings will be drawn from twentieth-century authors. Offered in 1980-81.

- 103b. *Logic*: Mr. Weaver.

An introduction to the fundamentals of deductive reasoning.

- 201a. *Reverse section of course 201b.*

- 201b. *Introduction to Philosophy: Modern Philosophy*: Members of the Department.

The development of philosophic thought from Descartes to Kant.

- 211b. *Theory of Knowledge*: Mr. Raff.

Discussion of such topics as skepticism, dogmatism, authority, truth, self-knowledge, perception, memory and objectivity. Readings from both current and traditional theorists, including empiricists, realists and idealists. Offered in 1980-81.

- 212a. *Metaphysics*: Members of the Department.

An examination of the structure of reality, with reference to such important classical and contemporary theories as monism, dualism, materialism and idealism.

Offered in 1981-82.

- 213b. *Intermediate Logic*: Mr. Weaver.

The systematization of the semantic and combinatorial presuppositions of deductive reasoning and their interrelationships. Prerequisite: Philosophy 103. Offered in 1980-81 and alternate years.

214. *Modal Logic*: Mr. Weaver.

Study of normal sentential modal logics. Topics include Kripke semantics, Makinson constructions, and back and forth constructions. Offered in 1981-82 and alternate years.

- 215b. *Introduction to Set Theory: Cardinals and Ordinals*: Mr. Weaver.

Study of the theory of cardinal and ordinal numbers in the context of Gödel-Bernays-von Neumann set theory. Topics include: equivalents of the axiom of choice and basic results in infinite combinatorics. Offered in 1980-81.

221. *Ethics*: Members of the Department.

A close study of classical and contemporary texts, with attention to such problems as the nature of moral conflict, freedom, responsibility, obligation and decision.

222. *Aesthetics*: Mr. Krausz.
An examination of aesthetic experience, the concept of creativity, and the range of application of this concept. Offered in 1981-82. (Also offered by Mr. Krausz at Swarthmore College, semester II, 1980-81.)
231. *Plato: Early and Middle Dialogues*: Members of the Department.
An examination of several dialogues, including *Lysis*, *Charmides*, *Meno*, *Protagoras*, *Phaedrus*, *Symposium*, and the *Republic*. Special attention will be given to structural and dramatic elements in the dialogues. Offered on demand.
- 232a. *Aristotle*: Mr. Ferrater Mora.
An introduction to Aristotle, stressing the relationships between Aristotelian metaphysics, natural science and moral philosophy. Offered in 1980-81.
- 234b. *History of Chinese Philosophy*: Mr. Song.
A survey of the origin and development of Chinese philosophical thought as represented by major philosophers. Offered in 1980-81.
- 235a. *Medieval Philosophy*: Miss Potter.
The history and development of medieval philosophy from its origins in classical and patristic thought through the fourteenth century. Offered in 1980-81.
310. *Philosophy of Science*: Mr. Krausz.
An examination of the problems of explanation, objectivity and rationality in scientific theory. Readings will be drawn from works by Ayer, Burt, Hanson, Kuhn, Lakatos, Popper and Toulmin. Offered in 1981-82 and alternate years.
311. *Philosophy of Religion*: Miss Potter.
The existence and nature of God and the character of religious language. Offered in 1981-82 and alternate years.
- 312b. *Philosophy of History*: Mr. Krausz.
An examination of representative analytic and speculative philosophies of history. The relativist/objectivist controversy will be considered. Offered in 1980-81 and alternate years.
- 313b. *Contemporary Philosophy*: Mr. Ferrater Mora.
A presentation and discussion of the instructor's points of view on basic metaphysical, epistemological, and ethical issues through a dialogue with such contemporary movements as existentialism, analytic philosophy, Marxism, structuralism and hermeneutics. Offered in 1980-81.
314. *Existentialism*: Members of the Department.
Topics chosen according to the interests of the students. Offered alternate years.
- 315a. *Concepts of Time*: Mr. Kline.
Questions to be discussed include: Is the past "closed"? Is the future "open"? Is the "before-after" relation reducible to that of "past-present-future"? Readings from both classical and contemporary authors. Offered in 1980-81 and on demand.

316. *History and Philosophy of Mathematics*: Mr. Weaver.
Topics vary from year to year. Topic for 1980-81: epistemological problems in the philosophy of mathematics. Topic for 1981-82: the construction and development of the basic number systems.
- 317a. *Philosophy of Creativity*: Mr. Krausz.
A systematic examination of theories of creativity in the arts and sciences. Offered in 1980-81 and alternate years.
318. *Philosophy of Language*: Mr. Weaver.
Topics include Tarski and the foundation of scientific semantics, and Montague grammar. Offered in 1981-82 and alternate years.
319. *Philosophy of the Social Sciences*: Mr. Krausz.
A critical examination of various theories of human nature and human action. Offered on demand.
322. *The Nature of Legal Reasoning*: Mr. Gaskins.
The nature of the reasoning process in the field of law. No prerequisites. Offered on demand.
- 330a. *Kant*: Mr. Dostal.
An examination of central themes of the *Critique of Pure Reason*. Offered in 1980-81 and alternate years.
- 331b. *Hegel*: Mr. Dostal.
An examination of central themes of the *Phenomenology of Spirit*. Offered in 1980-81 and alternate years.
332. *Texts in Medieval Philosophy*: Miss Potter.
A concentrated study of one or two of the important writings in medieval philosophy. Offered on demand.
333. *Russian Philosophy*: Mr. Kline.
A critical survey of major trends in Russian thought from the eighteenth century to the present, with special attention to ethics, social philosophy, and the philosophy of history. Offered in 1981-82 and on demand.
334. *The Varieties of Russian Marxism to 1917*: Mr. Kline.
A critical survey of the principal "revisionist" movements in Russian Marxism from the 1890s to 1917, with emphasis on the ethical and social theories of the "Kantian" and "Nietzschean" Marxists. Offered in 1981-82 and on demand. (Also offered by Mr. Kline at the University of Pennsylvania, semester II, 1980-81.)
335. *British Idealism*: Miss McPherson.
Emphasis will be placed on the writings of F. H. Bradley. Offered on demand.
336. *Plato: Late Dialogues*: Members of the Department.
An examination of several dialogues, including *Theaetetus*, *Sophist*, *Statesman*, and *Parmenides*. Special attention will be given to structural and dramatic elements in the dialogues. Offered on demand.
399. *Senior Conference*:
The Senior Conference is designed as a seminar combined with tutorial

sessions. The Conference emphasizes critical thinking and intensive writing on a central philosophic issue.

401. *Honors Work:*

Honors work consists of independent reading and conferences with the instructor, directed to the preparation of a paper on a subject dealing with the technical problems of philosophy or emphasizing the connection of philosophy with general literature, history, politics and science, or with some special field in which the student is working.

Physics

Professors: Rosalie C. Hoyt, Ph.D.

John R. Pruett, Ph.D.

Associate Professor: Alfonso M. Albano, Ph.D., *Chairman*

Assistant Professors: Neal B. Abraham, Ph.D.

Peter Beckmann, Ph.D.†

Laboratory Coordinator: Elizabeth Shimer, Ph.D.

Assistants: Steven P. Adams, B.S.

Robert M. Purcell, B.S.

Mary E. Scott, A.B.

The courses in physics emphasize the concepts and techniques that have led to our present state of understanding of the physical universe; they are designed to relate the individual parts of physics to the whole rather than to treat them as separate disciplines. In the advanced courses the student applies these concepts and techniques to increasingly independent studies of physical phenomena. Students are encouraged to supplement their courses in physics and mathematics with work in related sciences and by units of independent study or experimental work. Opportunities exist for interdisciplinary work, for participation by qualified majors in the research programs of the faculty, and for training in machine shop, glass blowing, computer and electronic techniques. Special arrangements make advanced courses available to majors in other sciences.

Requirements in the Major Subject: Physics 101 or its equivalent, 201a, 211b, 311a, 312b, 331c, and an additional half unit of 300 level work in physics at Bryn Mawr or in physics or astronomy at Haverford. One year of college level chemistry or its equivalent, Mathematics 101 or Haverford Mathematics 113a or 114a or b, Mathematics 201a and 202b or

† On leave for the year 1980-81.

Haverford Mathematics 213a and 214b, or 215a and 216b. Additional mathematics is strongly recommended. Students are encouraged to meet some of the major and allied requirements by advanced standing or placement examinations.

It is possible for a student who takes Physics 101 and Mathematics 101 in the sophomore year to major in physics. However, it is advisable for freshmen potentially interested in physics to take both Physics 101 and Mathematics 101 in the freshman year. Physics 308, 309 and 310 are especially useful for students intending to undertake graduate studies in physics, engineering or related sciences and such students are strongly encouraged to take as many of these courses as possible. Scheduling of these three one-semester courses varies from year to year. Physics 305 should be considered by students interested in experimental physics. See also the 3-2 plan with the California Institute of Technology (p. 53).

Allied Subjects: Astronomy (at Haverford), Biology, Chemistry, Geology, Mathematics, Philosophy, Psychology.

101. *Introduction to Modern Physics:* Mr. Pruett, Mr. Albano, Mrs. Shimer. A study of the principal phenomena of classical and modern physics in the light of the developments of the past eighty years. Any mathematical methods needed beyond those of high school mathematics will be developed in the course. Three lectures, one problem session and three hours of laboratory a week.
- 201a. *Electromagnetism and Electromagnetic Waves:* Mr. Albano. Electrostatics; electric currents and magnetic fields; electromagnetic induction; Maxwell's equations. The concepts of vector and scalar fields will be introduced and used throughout. Vector calculus will be introduced and developed as needed. Laboratory work will deal with direct and alternating current circuit theory, and with solid state electronic devices and circuits. Three lectures and four hours of laboratory a week. Prerequisites: Physics 101, or Haverford Physics 111a and 112b. Corequisites: Mathematics 201a or Haverford Mathematics 213a or 215a.
- 211b. *Classical Mechanics:* Miss Hoyt. Newtonian mechanics of single particles, systems of particles, rigid bodies, and continuous media with applications. Introduction to Lagrangian and Hamiltonian mechanics. Three lectures a week. Associated with this course is a four hour per week laboratory in physical optics. Prerequisites: Physics 201a or Haverford Physics 213a. Corequisites: Mathematics 202b or Haverford Mathematics 214b or 216b.
- 305b. *Electronics:* Mr. Pruett. Band theory of conduction; principles of solid state electronic devices and circuits, and applications to digital computers (particularly microcomputers) and other instruments. Computer interaction with measuring and control devices. Three hours of lecture and four hours of laboratory a week. Prerequisites: Physics 201a or Haverford Physics 213a. Corequisites:

Mathematics 202b, or Haverford Mathematics 214b or 216b. Interested students not satisfying these prerequisites see INT. 357b.

308a. *Advanced Classical Mechanics*: Mr. Albano.

Kinematics and dynamics of particles and macroscopic systems, including the use of configuration and phase space, normal mode analysis of oscillations, descriptions of the motions of rigid and elastic bodies. Mathematical methods will be introduced as needed. Four hours a week. Pre- or co-requisite: a 300 level physics course or, with permission of the instructor, advanced work in chemistry, astronomy or mathematics.

309b. *Advanced Electromagnetic Theory*: Mr. Davidson (at Haverford).

310b. *Mathematical Physics*: Miss Hoyt.

Vector calculus, tensor analysis, partial differential equations, boundary value problems, higher transcendental functions and expansion in orthogonal sets. Four hours a week. Prerequisites: Physics 201a or Haverford Physics 213a, Physics 211b or Haverford Physics 214b, Mathematics 202b, or Haverford Mathematics 214b or 216b. With permission of the instructor, comparable work in other sciences may be substituted for the physics prerequisites.

311a. *Quantum Physics I*: Miss Hoyt.

Quantum description of physical phenomena. Origins of quantum theory; Schrödinger's equation and wave mechanics; observables, operators, state vectors and measurement theory; uncertainty and complementarity; one dimensional problems; angular momentum; the one electron atom. Three hours a week. Prerequisites: Mathematics 202b or Haverford Mathematics 214b or 216b. Corequisites: Physics 201a or Haverford Physics 213a. (With permission of the instructor, students not majoring in Physics at Bryn Mawr may be allowed to waive the physics corequisites.)

312b. *Quantum Physics II*: Mr. Abraham.

An introduction to the formal structure of quantum mechanics; measurement theory; spin angular momentum; the exclusion principle; vector model of the atom; perturbation theory, transition rates and selection rules; Hartree theory and multielectron atoms; molecular bonding; electronic, vibrational and rotational spectroscopy; the role of symmetry in quantum physics. Three hours a week. Prerequisites: Physics 311a or Haverford Physics 214b.

331c. *Modern Physics Laboratory*: Mr. Abraham.

Set-piece experiments as well as directed experimental projects to study selected phenomena in atomic, molecular, nuclear and solid state physics. These experiments and projects will also serve as an introduction to contemporary instrumentation and precision measurement techniques. Co-requisite: Physics 311a.

357b. *Computer Usage in the Life Sciences*: Mr. Pruett.

(INT.) Projects relating to the design and support of experiments or measurements in the life sciences will be undertaken. A basic computer assembly language will be developed and used in the course. An introduction to the digital and

analog electronics necessary to the understanding of the computer and its online interaction with biomedical experiments and measuring apparatus is developed for those choosing projects in this area. Two lectures and three hours of laboratory a week. Limited to advanced students with some research or laboratory experience. Some knowledge of a higher level of computer language is desirable. (May not be used to satisfy major requirements in Physics.)

399. *Senior Conference:*
1980-81.

Senior Conference consists of four half-semester minicourses. One of these will be Atomic Physics and the other three will be determined by the department in consultation with the physics majors at the end of their junior year. The minicourses are as follows:

Atomic Physics: Vector model of the atom, perturbation theory, transition rates, selection rules, the exclusion principle, Hartree theory and multi-electron atoms.

Solid State Physics: Crystallography, crystal diffraction, crystal binding, lattice vibrations, metals, band theory and semiconductivity theory.

Molecular Physics: Bonding; electronic, vibrational and rotational spectroscopy; the role of symmetry.

Nuclear Physics: Nuclear properties; alpha, beta and gamma decay; nuclear forces; nuclear reactions and scattering; nuclear models.

Particle Physics: Properties and classification of elementary particles, strong and weak interactions, conservation laws and symmetry, gauge theories and the quark model.

Plasma Physics: Properties of plasmas, dynamics of charged particles in electromagnetic fields, nuclear fusion devices.

Special Relativity: Fundamental postulates, Lorentz transformations, particle kinematics and dynamics.

General Relativity: Geometry of space-time and Einstein's field equations, cosmology and cosmogeny.

1981-82.

a. *Statistical and Thermal Physics:*

Statistical description of the states of classical and quantum systems; conditions for equilibrium; statistical basis of thermodynamic concepts and the Laws of Thermodynamics; microcanonical, canonical and grand canonical ensembles and applications; Fermi-Dirac, Bose-Einstein, and Maxwell-Boltzmann statistics with applications to solid state physics, low temperature physics, atomic and molecular physics and electromagnetic waves; classical thermodynamics with applications to gases.

b. Two mini-courses taken from the 1980-81 list with the exception of Atomic Physics and Molecular Physics.

401. *Honors Work:* Members of the Department.

Honors work may be taken by seniors with permission of the department. It consists of reading and original work of current interest in physics, and a

paper is required at the end of the year. The subject matter is usually associated with the current research activities of the department, but can be modified to reflect the goals and interests of the student. In theoretical physics, the present research activities involve quantum optics (Mr. Abraham), non-equilibrium thermodynamics and hydrodynamics (Mr. Albano), spin-lattice interactions and solid-solid phase transitions (Mr. Beckmann), biophysics of nerve fibers (Miss Hoyt) and computer modeling of biological molecules and biomembrane structure (Mr. Pruett). In experimental physics, present activities include laser physics (Mr. Abraham), pulsed nuclear magnetic resonance (Mr. Beckmann) and nuclear physics (Mr. Pruett). Joint Honors with more than one faculty member is possible, as is interdisciplinary joint Honors involving another department.

403a. *Supervised Units in Special Topics:*

- & b. Open to qualified juniors and seniors who wish to supplement their work with independent study or laboratory work in a special area of physics, subject to faculty time and interest. A written paper may be required at the end of the semester or year. Among the available topics are:

Laser Physics: Mr. Abraham.

Research in laser physics; investigations of output characteristics of high-gain gas lasers: mode structure, intensity fluctuations, pulsing phenomena, and effects of anomalous dispersion. Studies of the properties of amplified spontaneous emission: intensity fluctuations and spectral widths. Interaction between matter and the quantized radiation field (photons).

Non-Equilibrium Thermodynamics and Statistical Mechanics: Mr. Albano. Directed research on problems in equilibrium and non-equilibrium statistical mechanics and non-equilibrium thermodynamics. Problems will mainly be concerned with the description of interfacial systems and non-linear transport phenomena.

Nuclear Magnetic Resonance: Mr. Beckmann.

Experimental and theoretical research in nuclear magnetic resonance: molecular dynamics and molecular interactions in solids and gases. Nuclear spin lattice relaxation experiments are performed in the physics department and high resolution nuclear magnetic resonance spectroscopy is performed in the chemistry department.

Molecular Physics as Applied to Biomembrane Structure and Function and Biologically Active Molecules: Mr. Pruett.

A large computerized molecular modelling system is available to support theoretical investigations in this area. Experimental measurements using nanosecond time resolved ultraviolet spectroscopy may be used to investigate the dynamics of interaction of fluorescent molecules with their environment.

Teaching Certification:

A sequence of work offered by the Department of Physics and the Department of Education of the College leads to a certificate to teach in the secondary schools of Pennsylvania.

Political Science

The Caroline McCormick Slade Department of Political Science

Professors: Melville T. Kennedy, Jr., Ph.D.

Gertrude C. K. Leighton, A.B., J.D.

Marc Howard Ross, Ph.D., *Chairman*

Associate Professors: Charles E. Frye, Ph.D.

Stephen Salkever, Ph.D.

Assistant Professor of Philosophy: Richard Gaskins, Ph.D., J.D.

The major in political science is concerned with the study of normative and empirical theories of government and with an analysis of the structures and processes of modern political communities. If Bryn Mawr students elect to take the major at Haverford College, the decision must be made in the sophomore year with full consultation of the chairmen of both departments.

Requirements in the Major Subject: Students majoring in political science must take a minimum of four units of course work, the Senior Conference in the major and two units in allied work. At least one unit of major work must be taken in advanced courses. As a prerequisite to all other courses offered, majors must complete one unit of work chosen from among the following: 200b (INT.), 201a, 202, 203a, 204b, 205a, 206a, 207b, 208, 209. Students who are not majors in the department may meet this prerequisite in the same way or alternatively by completing one half-unit of allied work and one half-unit in political science chosen from the list of courses above.

The fields of the major, from which two must be selected for special concentration, are: political philosophy and theory, politics and law in American society, comparative politics, international politics and law. At least three courses (one and one-half units of work), including a minimum of one advanced course, must be taken in each of the fields selected. For courses arranged according to fields, see page 143. With the permission of the department one of the fields may be taken in an allied subject.

Non-majors wishing to take a special field in political science must consult the chairman for approval of course plans in order to qualify for required Senior Conference program.

Allied Subjects: Anthropology, Economics, Education, History, Philosophy, Psychology and Sociology. With the permission of the department, certain courses offered by the modern language departments may be accepted as allied subjects.

- 200b. *Urban Society*: Mrs. Lane, Mr. Ross.
(INT.) The techniques of the social sciences as tools for studying historical and contemporary cities, considering such topics as ethnicity, the role of neighborhoods and local communities, and participation. Offered in 1981-82.
- 201a. *American Politics*: Mr. Ross.
An examination of the forces shaping political behavior and values in the United States, with particular attention to the processes of political socialization, public opinion formation, agenda building, decision making and policy implementation.
- 202a. *American Political Institutions and Their Dynamics*: Mr. Waldman,
or b. Mr. Williams (at Haverford).
- 203a. *Government and Politics in East Asia*: Mr. Kennedy.*
An approach to modern Asian politics through a brief study of China's classical era and the values and early institutions underlying the Chinese dynastic system. Special emphasis is placed on the Western impact and on political adjustments to twentieth-century forces. The emergence of Japan from the Tokugawa to the modern era provides a brief comparative study.
- 204b. *Twentieth-Century China and India*: Mr. Kennedy.
A comparative examination of the politics of China and India in the twentieth century with special attention to the roles of nationalism and communism. Major emphasis on the evolution of the Maoist system in China.
- 205a. *Government and Politics in Western Europe*: Mr. Frye.
A comparative analysis of the contemporary political systems of Great Britain and France with special reference to social-psychological factors making for stable and effective democracy.
- 206a. *Comparative Government and Politics*: Mr. Glickman (at Haverford).
- 207b. *Government and Politics in Western Europe*: Mr. Frye.
A comparative analysis of the contemporary political systems of Germany, Italy and the Soviet Union. The analysis leans heavily towards literature on authoritarianism.
- 208a. *International Politics*: Mr. Mortimer (at Haverford).
or b.
- 209b. *Western Political Philosophy (Ancient and Early Modern)*: Mr. Salkever.
A study of the fundamental problems of Western political philosophy, especially the issue of the relationship between politics and human excellence. Readings from Plato, Aristotle, Machiavelli, Hobbes and Rousseau.
- 211a. *The Soviet System*: Mr. Hunter (at Haverford).
(INT.)
- 218b. *Conflict and Conflict Management: A Cross-Cultural Approach*: Mr. Ross.
(INT.) Why and how do societies throughout the world differ in terms of the level of conflict which takes place within and between communities? How do they vary in the ways disputes are settled? Using cases drawn from a wide variety of cross-cultural settings, this course develops several answers to these questions, and seeks to examine the evidence supporting each one. A

final goal is to extend the analysis beyond the traditional societies considered at the outset and to examine the relevance of these explanations for understanding political conflict and dispute settlement in the U.S. and other contemporary settings. Offered in 1980-81 and alternate years.

219b. *American Constitutional Law*: Mr. Williams (at Haverford).

221b. *International Law*: Miss Leighton.

An examination of the doctrines and practices of international law. Traditional material is considered in the context of the contemporary political process, with some emphasis on methodological problems. *Not open to freshmen.*

224b. *The American Presidency*: Mr. Waldman (at Haverford).

227a. *American Political Theory*: Mr. Schwartz (at Haverford).

230b. *Political Behavior*: Mr. Ross.

A consideration of major empirical theories of political action. Topics considered will be: the origin and impact of political beliefs on behavior, the nature of mass movements, and sociobiological explanations for aggression and other collective behaviors of political relevance. Offered in 1981-82.

231a. *Western Political Philosophy (Modern)*: Mr. Salkever.

A continuation of Political Science 209, although 209 is not a prerequisite. Particular attention will be paid to the various meanings of the concept of freedom. Readings from Locke, J. S. Mill, Hegel, Nietzsche, Marx. *Not open to freshmen.*

245b. *International Relations (Advanced)*: Mr. Mortimer (at Haverford).

246b. *International Organization*: Mr. Mortimer (at Haverford).

256b. *Modern and Contemporary Political Theory*: Miss Shumer (at Haverford).

301a. *Law and Society*: Miss Leighton.

An introduction to the nature of legal obligation and its relation to selected social institutions. Typical legal problems pertaining to the family, property and government are discussed.

302a. *Law, Policy and Personality*: Miss Leighton.

Selected topics in the study of the relation between the legal process and personality development and structure. Attention is given, in the light of this perspective, to the policy implications of various legal doctrines pertaining to such subjects as divorce, child-rearing and criminal responsibility. Prerequisites: Political Science 219, 301, or 313, or permission of the instructor.

305b. *European Fascism*: Mr. Frye.

Offered in 1981-82.

309b. *Topics in Modern Political Thought*: Mr. Frye.

Study of a medley of political problems (including alienation, freedom, political obedience) of modern societies from the perspective of different thinkers including Sartre, Marx and Marcuse.

311b. *Theory and Practice in Political Philosophy*: Mr. Salkever.

A consideration of one of the central processes of political philosophy—the transition from Fact to Value. Typical alternative modes of linking

theoretical and practical assertions will be studied through the works of ancient and modern philosophers. Prerequisites: Political Science 209 or either Philosophy 101 or 201.

- 312b. *China, Japan, India: Problems in Modernization*: Mr. Kennedy.
Intensive review of established assessments and definitions of modernization and political development followed by a study of examples of recent political change in these societies. The seminar will participate in determining the countries and central questions on which the study focuses.
- 315b. *Political Authority and Decision Making*: Mr. Ross.
An analysis of how the nature and organization of political authority shapes the ways decisions are made and resources allocated. Specific topics considered will include: legitimacy and support for political authority, the organization of authority, authority and resource distribution, authority and compliance, and the limits to authority. Offered in 1980-81.
- 317a. *Political Culture and Political Leadership*: Mr. Frye.
A study of relations between political cultures and styles of political leadership in different Western countries.
- 318a. *Urban Political Conflict*: Mr. Ross.
(INT.) The development of a framework for the analysis of conflict in urban communities through an analysis of the politics of urban education. Each student will undertake individual research on politics and education in the Philadelphia metropolitan area. Prerequisite: one year of 200 level work in the social sciences. Offered in 1981-82.
- 320b. *Problems in Greek Political Philosophy*: Mr. Salkever.
Careful study of a selected text, concept or author. Topics will vary from year to year. Prerequisite: Political Science 209 or Philosophy 101. Topic for 1981: Philosophy and Statesmanship in Plato. Focus on the *Gorgias*, the *Theaetetus*, and the *Statesman*.
- 321a. *Problems in Public Management*: Mr. Fisher (at Haverford).
- 322b. *The Nature of Legal Reasoning*: Mr. Gaskins.
- 323a. *American Political Process: The Congress*: Mr. Waldman (at Haverford).
- 325b. *American Pluralism in Fact and Theory*: Miss Shumer (at Haverford).
- 327a. *Political Philosophy in the Twentieth Century*: Mr. Salkever.
An examination of some of the various ways of construing the meaning of the contemporary political world in the light of categories developed within the tradition of political philosophy. Some questions to be considered are the relationship between human goodness and active citizenship, the issue of idealism and the limits of the politically possible, and the problem of the relationship between practical (i.e. moral and political) philosophy and modern science. Principal authors to be read are Hannah Arendt, Jurgen Habermas, Michael Oakshott, and Leo Strauss. Prerequisites: Political Science 209 or Philosophy 101 and some modern philosophy or political philosophy. Offered in 1980-81 and alternate years.
- 328a. *United States Policy in Asia*: Mr. Kennedy.
The plan of the course will be to address selected theoretical issues in the

making and implementing of foreign policy; to gain a perspective on American policies and relations in Asia in this century; and to examine a few of the major forces that appear to have influenced policy formation down to the recognition of Peking. Attention will center on key questions relating to a few such major developments and institutions as the Open Door, UNRRA, the China Lobby, containment, inception of the Cold War, Korea, Vietnam and the role of recognition, and the persistent problem of balance.

- 327a. *Political Philosophy in the Twentieth Century*: Mr. Salkever.

An examination of some of the various ways of construing the meaning of the contemporary political world in the light of categories developed within the tradition of political philosophy. Some questions to be considered are the relationship between human goodness and active citizenship, the issue of idealism and the limits of the politically possible, and the problem of the relationship between practical(i.e. moral and political) philosophy and modern science. Principal authors to be read are Hannah Arendt, Jurgen Habermas, Michael Oakshott, and Leo Strauss. Prerequisites: Political Science 209 or Philosophy 101 and some modern philosophy or political philosophy. Offered in 1980-81 and alternate years.

- 328a. *United States in Asia*: Mr. Kennedy.

The plan of the course will be to address selected theoretical issues in the making and implementing of foreign policy; to gain a perspective on American policies and relations in Asia in this century; and to examine a few of the major forces that appear to have influenced policy formation down to the recognition of Peking. Attention will center on key questions relating to a few such major developments and institutions as the Open Door, UNRRA, the China Lobby, containment, inception of the Cold War, Korea, Vietnam and the role of recognition, and the persistent problem of balance.

- 335a. *Imperialism*: Mr. Glickman, Mr. Mortimer (at Haverford).

- 336b. *African Politics*: Mr. Glickman (at Haverford).

- 340b. *Latin American Politics*.

- 356b. *Topics in Modern Political Theory*: Miss Shumer (at Haverford).

- 390b. *Junior Seminar in Political Studies*: Mr. Waldman (at Haverford).

- 391a. *Research Seminar in American Politics and Political Theory: Interest Groups*: Mr. Waldman (at Haverford).

- 393a. *Research Seminar in International Politics and Political Development*: Mr. Glickman, Mr. Mortimer (at Haverford).

- 394a. *Research Seminar in Comparative Politics and Foreign Policy: American Policy Towards Africa*: Mr. Glickman (at Haverford).

- 399a. *Senior Conference*:

Each major is required to take at least one half-unit from the advanced research colloquia (399a at Bryn Mawr, 391-396 at Haverford) in the fall of her senior year and to write a senior research paper in the spring (399b). The colloquium will offer the student experience in conducting original

research in political science. A student will normally take the colloquium in the fall of her senior year after having completed or while completing her other work in the appropriate area of concentration. The senior research paper will normally be in either of the student's two fields of concentration and will be supervised by a member of the department whose speciality is in the same or related fields. In the spring of her senior year each student will take an oral examination based on her senior paper. A student may take more than one colloquium. Honors majors can fulfill their Senior Conference requirement in one of three ways: (1) they may take two colloquia in the first semester of their senior year, (2) they may take one colloquium in the fall and write their senior research project in the fall, or (3) they may take one colloquium in the fall and write their senior research paper in the spring.

Sections for 1980-81

1. *Voting Behavior*: Mr. Ross.

A critical analysis of the major studies of elections and voting behavior in the United States. What do we know about the forces shaping the electoral decisions voters make? How does the behavior of the electorate differ from popular conceptions and from the model posited by democratic theory? How are the various approaches in conflict? Students will conduct their own research using data from recent national election studies in the U.S.

2. *A Study of Power*: Mr. Kennedy.

A seminar on the social analysis of power with major questions on its sources, nature, manifestations, and on characteristic efforts to cope with power in Western society. Some attention will be given to comparable concepts and issues in non-Western societies partly to clarify Western definitions and partly to identify political problems that root in such intercultural differences.

399b. *Senior Research*: Members of the Department.

Students will conduct independent research under the direction of a member of the department.

FIELDS OF CONCENTRATION

1. *Political Philosophy and Theory*: political analysis; Western political philosophy; recent political philosophy; sources and varieties; Western political thought; ancient and medieval; political behavior; theory and practice in political philosophy; selected topics in modern political thought; American political theory (at Haverford); problems in contemporary American political theory (at Haverford); philosophical basis of social science; political philosophy in the twentieth century.
2. *Politics and Law in American Society*: American national politics; conflict and conflict management; ethnic group politics; political behavior; constitutional law; law and education; law and society; law, policy and

personality; the American political process; parties and the Congress (at Haverford); problems in contemporary American political theory (at Haverford); elections and political change; public opinion and public policy; political authority and decision making; urban society; urban political conflict.

3. *Comparative Politics*: government and politics in East Asia; twentieth-century China and India; government and politics in Western Europe; conflict and conflict management; Western European integration; European Fascism; problems in comparative politics; China, Japan, and India; problems in modernization; the Soviet system (at Haverford); comparative politics; political development (at Haverford); political authority and decision making.
4. *International Politics and Law*: international law; international politics; courses on Asia and Europe; international relations and organization (at Haverford); politics and international relations in the Middle East and North Africa (at Haverford); international politics of Communism (at Haverford); United States policy in Asia.

401. *Honors Work*:

Seniors admitted to Honors work prepare an independent research paper (one unit of credit) under the supervision of a member of the Department. Field work is encouraged.

Interdepartmental Work:

The Department of Political Science participates in the interdepartmental concentration in Hispanic and Hispanic-American Studies and in the interdepartmental major in The Growth and Structure of Cities. See pages 166 and 164.

Teaching Certification:

A sequence of work offered by the Department of Political Science and the Department of Education of the College leads to a certificate to teach in the secondary schools of Pennsylvania.

Psychology

Professors: Richard C. Gonzalez, Ph.D., *Chairman*
Howard S. Hoffman, Ph.D.
Matthew Yarczower, Ph.D.

Associate Professors: Clark McCauley, Jr., Ph.D.
Earl Thomas, Ph.D.

Assistant Professor: Virginia Mann, Ph.D.

Laboratory Coordinators: Erika Rossman Behrend, Ph.D.
Alice S. Powers, Ph.D.

Assistants: Jacquelyn Cranney, B.A.
Laura Daruns, M.A.
William Grisham, M.A.
Mary Segal, B.A.

The department, in coordination with that at Haverford College, offers to the major student a representative account of methods, theory and findings in cognitive, comparative, developmental, experimental, personality, physiological and social psychology. The program of work is planned to encourage the student, in the first two years of study, to sample widely from among the course offerings in these areas and to permit her, in the final two years, to focus attention (by course work and research) on the one or two areas of her principal interest.

Requirements in the Major Subject: (a) Psychology 101 (or its equivalent) and 205a (*Experimental Methods and Statistics*); (b) four courses at the 200 level selected from the following: *Learning Theory and Behavior*, *Human Learning and Memory*, *Comparative Psychology*, *Sensation and Perception*, *Developmental Psychology*, *Psychology of Reading*, *Social Psychology*, *Theories of Personality* (or *Personality and Culture*), *Psychology of Language*; (c) two courses at the 300 level selected from the following: *Emotion*, *Physiological Psychology*, *Psychological Testing*, *Psychology of the Abnormal Personality* or one unit of *Supervised Research in Psychology* (Psychology 403) or (with special permission of the chairman of the department), one of the 300-level courses listed above and one-half unit of supervised research; (d) two Senior Conference courses (399) selected from the following: *Psychopharmacology*, *Advanced Topics in Behavior Theory*, *Cognitive Issues in Personality and Social Psychology*, *Language Development*.

Psychology 101 (or its equivalent) is prerequisite to all 200 level courses, with the exception of 205a. Some second semester courses at the 200-level may, with permission of the department, be taken concurrently with Psychology 101. All courses at the 300 level have specific 200-level prerequisites (listed below after the description of each 300-level course)

which are unalterable. Each Senior Conference course requires *two full units of work at the 200 level*; specific prerequisites for each are listed after the course description. Under conditions in which all prerequisites have been met, more than two Senior Conference courses may be taken, and the additional one(s) used to meet the 300-level (c) requirement.

Allied Subjects: Anthropology, Biology, Chemistry, Computer Science, Education, History of Science, Linguistics, Mathematics, Philosophy, Physics, Sociology. For students preparing for graduate work, it is recommended that one unit of allied work be taken from among Biology, Chemistry, Physics and Mathematics.

Note: These requirements in the major apply to the Class of 1983 and subsequent classes. They differ in a number of significant respects from those in effect for prior classes. Students in the Class of 1982 have the option of meeting these new requirements, or the older ones, or some combination of the two. They should consult with the chairman of the department about their major plans.

101. *Experimental Psychology:* Mr. Gonzalez, Miss Mann, Mr. Thomas.
A survey of methods, facts and principles relating to basic psychological processes, their evolution, development and neurophysiology. Three hours of lecture and four hours of laboratory a week.
 - 102a. *Process and Effects of Mass Media Communications:* Mr. McCauley.
Commercial advertising; political advertising, including the psychology of voting; the agenda of public issues; television violence; pornography.
- The following courses include individual laboratory research projects:*
- 200a. *Human Learning and Memory:* Miss Naus (at Haverford).
 - 201a. *Learning Theory and Behavior:* Mr. Gonzalez.
A systematic analysis, in historical perspective, of the major conceptions of the nature of animal intelligence and the data bearing on them, with special emphasis on cognitive processes and their evolution. The course provides the foundation for the further study of intelligence and behavior, particularly as treated in courses on human learning and memory, language and cognition, comparative psychology and physiological psychology.
 - 202b. *Comparative Psychology:* Mr. Yarczower.
Evolution and behavior. Human social behavior is treated in comparative perspective. Current literature dealing with aggression, attachment, language, predation, sex, ethics and self-awareness provides the basis for consideration of major issues in ethology, sociobiology and comparative psychology.
 - 204b. *Sensation and Perception:* Mr. Hoffman.
A systematic examination of the way in which sensory signals are detected, analyzed and transformed in the course of their perception, Examples in the domains of human vision and audition illustrate modern analytical approaches to the perception of color, form and distance and to the perception of acoustical events, such as speech and music. Individual projects will examine one or more current problems in these areas.

- 205a. *Experimental Methods and Statistics*: Mr. Hoffman.
Measurement, descriptive statistics, probability, association, testing of hypotheses, the design of experiments and associated problems.
- 206a. *Developmental Psychology*: Miss Mann.
Development and behavior. The ontogeny of attention, perception, learning, language, intelligence and social interaction.
- 207b. *The Psychology of Reading*: Miss Mann.
The perceptual and cognitive components of the reading process. The development of reading, from the visual perception of print to the comprehension of prose. Attention is given to the relation between written and spoken language and to the possibility that reading is to some extent "parasitic" on speech. Lectures and reading material are designed to impart basic knowledge of psycholinguistics as well as of the psychology of reading.
- 208a. *Social Psychology*: Mr. Perloe (at Haverford).
- 208b. *Social Psychology*: Mr. McCauley.
A survey of major theories and data in the study of social influence and persuasion. Special attention to problems of research design of importance generally in the conduct and evaluation of research with human subjects. Specific topics include: group dynamics (conformity, leadership, encounter groups, crowd behavior), attitude change (consistency theories, attitudes and behavior, mass media persuasion), person perception (stereotyping, attribution theory, implicit personality theory), altruism and helping behavior, crowding and urban behavior. Participation in a research project is required.
209. *Theories of Personality*: Miss Mann.
Offered for the first time in 1981-82.
- 211a. *Theories of Personality*: Mr. Heath (at Haverford).
- 215a. *Personality and Culture*: Mr. Davis (at Haverford).
- 238b. *Psychology of Language*: Mr. D'Andrea (at Haverford).
- 301a. *Emotion*: Mr. Yarczower.
Recent developments in the study of emotional expression that bear importantly on the cognitive, social and clinical significance of emotion, affect and feeling. Consideration of major issues in the study of the development, recognition and control of emotion. Prerequisites: any two of the following: Psychology 201a, 202b, 206a, 208. One of the prerequisites may be taken concurrently with Psychology 301a.
- 302b. *Physiological Psychology*: Mr. Thomas.
The physiological and anatomical bases of experience and behavior: sensory processes and perception, emotion, motivation, learning and cognition. Prerequisite: Psychology 201a.
- 305b. *Psychological Testing*: Mr. McCauley.
The goals of the course are to provide an understanding of the logic and methodology of psychological testing, including reliability and validity theory, and a first-hand acquaintance with a variety of psychological tests, that will enable the student to evaluate and use tests for either research or practical selection problems. Intelligence tests (WAIS, WISC, Stanford-

Binet; Raven and Cattell "culture-fair" tests), aptitude tests (SAT, GRE), and personality tests (MMPI, Rorschach) are treated in detail. Special issues considered include: intelligence vs. creativity testing, hereditary vs. environmental determinants of I.Q., trait vs. situational determinants of behavior. Participation in a test-construction project is required. Prerequisite: Psychology 205a.

309a. *Abnormal Personality*: Mr. Davis (Haverford).

Prerequisite: Psychology 209 or 211a or 215a.

344b. *Development through the Life Span*: Mr. Heath (Haverford).

357a. *Computer Usage in the Life Sciences*: Mrs. Pruett.

(INT.) Experiments in the life sciences will be analyzed using computer techniques. The Fortran IV language will be developed and used throughout the course. Limited to advanced students with research experience; no previous training in the use of the computer is required. Lecture two hours, laboratory two hours a week.

399. *Senior Conference*:

Advanced work, in the form of one-semester seminar courses, is offered in four major areas of psychology: behavior theory, brain and behavior, cognitive development, and social-personality. The requirement is two of the following Senior Conference courses, each of which has as a general prerequisite a minimum of four courses at the 200 level, exclusive of Psychology 205a.

Advanced Topics in Behavior Theory: Mr. Gonzalez.

Contemporary problems in animal learning and behavior, with special emphasis on the evolution of cognitive processes. Specific prerequisite: Psychology 201a. Psychology 302b is highly recommended.

Psychopharmacology: Mr. Thomas.

The role of drugs in understanding of basic brain-behavior relations. The pharmacological basis of motivation and emotion, pharmacological models of psychopathology, the use of drugs in the treatment of psychiatric disorders, such as anxiety, depression and psychosis. The psychology and pharmacology of drug addiction. Specific prerequisites: Psychology 201a and 302b.

Language Development: Miss Mann.

The development of human language, with emphasis on the relative roles of experience and physical maturation. The findings in speech perception and production, the acquisition of lexical knowledge, and the development of semantic and syntactic capacities and discourse skills. Of particular concern are the biological bases of language and the extent to which the pattern of language acquisition reflects the "tuning" of specific neural structures by linguistic input from the child's environment. A consideration, also, of Piaget's view of the relation of language development to development during the sensorimotor stage. Specific prerequisite: Psychology 206a.

Cognitive Issues in Personality and Social Psychology: Mr. McCauley. An examination of the relation between informational inputs and judgmental responses in a number of research areas of current interest: the perception of physical causality, attribution theory and the perception of social causality, person perception and the attribution of traits, diagnosis in clinical psychology, and categorical thinking and stereotyping. Bayesian and correlational analyses of biased information processing are compared in each area examined. Specific prerequisites: Psychology 205a, 208, and either 209, 211a or 215a.

401. *Honors Work:* One unit of Honors work may be taken by students nominated by the department.
403. *Supervised Research in Psychology:* Members of the Department. Laboratory or field research under the supervision of a member of the department.

Religion

AT HAVERFORD COLLEGE

Associate Professor: Richard Luman, Ph.D.

Assistant Professor: Ronald F. Thiemann, Ph.D., *Chairman*

Instructor: Holland Hendrix, S.T.M., M.Div.

The Department of Religion is concerned with the historical study of religious traditions in the archaic, ancient, classical and Judeo-Christian-Islamic West and with the philosophical study of religious thought, particularly in its modern forms of expression.

Major Requirements: The exact structure of the student's program must be determined in consultation with the major adviser, whom the student chooses, in consultation with the chairman, from among the regular members of the department. The program must include the following courses:

- a. Religion 101a; Religion 102b; and 399b.
- b. Seven additional half-year courses. Introductory courses (100 level) will not be accepted as satisfying this requirement. Two of these courses may, with Departmental permission, be *upper-level* courses in other departments, including foreign languages. Also among the seven courses must be a two-course sequence drawn from among the following sets: (a) 201a, 202b; (b) 207a, 208b; (c) 209a, 210b; (d) 235a, 236b;

(e) 243a, 244b, 245a (two of three). Other advanced courses to complete the seven courses total may be taken at either Bryn Mawr or Haverford College.

Each student's program and record will be reviewed annually with the department, in the first two weeks of the fall semester.

Final evaluation of the major program will consist of written work and oral examinations to be administered during the senior year in the context of the work for Religion 399b.

Where necessary for the major program, the department strongly urges the study of appropriate foreign languages.

Requirements for Honors: Honors in Religion are awarded on the basis of the oral part of the senior evaluation, and on work as juniors and seniors, with special emphasis on work in the department. High Honors are awarded on the same basis, with the addition that special consideration shall be given to work done in independent study courses and seminars.

- 101a. *Religion in Traditional Culture:* Mr. Luman.
- 102b. *Religion in Modern Culture:* Mr. Thiemann.
- 201a. *History of Western Religious Thought and Institutions:* Mr. Luman.
- & 202b. Offered in 1980-81 and alternate years.
- 207a. *Letters of Paul:* Mr. Hendrix.
Offered in 1980-81 and alternate years.
- 208b. *The Synoptic Gospels:* Mr. Hendrix.
Offered in 1980-81 and alternate years.
- 209a. *The Johannine School:* Mr. Hendrix.
Offered in 1981-82 and alternate years.
- 210b. *Documents of Early Christianity:* Mr. Hendrix.
Offered in 1981-82 and alternate years.
- 215a. *Modern Critics of Christianity:* Mr. Thiemann.
Offered in 1980-81 and alternate years.
- 217a. *The Growth and Development of Israelite Religion:* Mr. Hendrix.
- 218b. Offered in 1981-82 and alternate years.
- 221a. *Classical Religions of the Greeks and Romans:* Members of the Department.
Offered in 1980-81 and alternate years.
- 222b. *Religions of Salvation:* Mr. Hendrix.
Offered in 1980-81 and alternate years.
- 226b. *The German Church Struggle:* Mr. Thiemann.
Offered in 1981-82 and alternate years.
- 235a. *The Late Medieval Church:* Mr. Luman.
Offered in 1981-82 and alternate years.
- 236b. *The Protestant Reformation:* Mr. Luman.
Offered in 1981-82 and alternate years.
- 240b. *History and Principles of Quakerism:* Mr. Bronner.
- 243a. *Religion in the Age of Reason:* Mr. Thiemann.
Offered in 1980-81 and alternate years.

- 244b. *Crisis and Recovery: The Theology of the Nineteenth Century:* Mr. Thiemann.
Offered in 1980-81 and alternate years.
- 245a. *Contemporary Religious Thought:* Mr. Thiemann.
Offered in 1981-82 and alternate years.
- 252a. *Studies in Spirituality:* Members of the Department.
Offered in 1981-82 and alternate years.
- 255a. *Anthropology of Religion:* Mr. MacGaffey.
- 270a. *Religion and Morality:* Mr. Thiemann.
Offered in 1981-82 and alternate years.
- 282b. *The Scandinavian North: The Icelandic Sagas:* Mr. Luman.
Offered in 1981-82 and alternate years.
- 290b. *Christianity in Confrontation:* Members of the Department.
Offered in 1981-82 and alternate years.
300. *Comparative Religion: Judaism in the Midst of Other Religious Traditions:* Mr. Kosman, Mr. Silberstein.
Offered in 1980-81 only.
- 301a. *Judaism and the Greco-Roman World:* Mr. Gager.
Offered in 1980-81 only.
- 310a. *Life and Theology of Martin Luther:* Mr. Luman.
Offered in 1980-81 and alternate years.
- 338a. *Philosophy of Religion:* Mr. Thiemann.
Offered in 1980-81 and alternate years.
- 345a. *Seminar in Western Religious History:* Mr. Luman.
- 346a. *Seminar in Religious Thought:* Mr. Thiemann.
or b.
- 350a. *Seminar in History of Religions:* Mr. Hendrix.
or b.
- 38a, b. *Teaching Assistance.*
- 399b. *Modern Trends in Religion:* Members of the Department.
- 40a, b. *Independent Study:* Members of the Department.

Russian

Associate Professors: Dan E. Davidson, Ph.D., *Chairman*
Ruth L. Pearce, Ph.D.

Assistant Professor: George S. Pahomov, Ph.D.

Lecturers: Nina M. Baranova, M.A.
Viktoria A. Schweitzer, DPL.

Professor of Philosophy: George L. Kline, Ph.D.

AT HAVERFORD

Professor of Economics: Holland Hunter, Ph.D.

Professor of History: Linda G. Gerstein, Ph.D.

The Russian major is designed to offer the student the opportunity to learn to both read and speak Russian and to achieve an understanding of the literature, thought and culture of pre-revolutionary and contemporary Russia. The study of the Russian language is combined with a study in depth of one of the following areas of concentration: Russian literature, economics, Russian history or philosophy.

Students in all courses are encouraged to make use of tapes available in the Language Laboratory. Majors are encouraged to take advantage of various Russian language summer programs offered both here and in the Soviet Union and to compete for a place in a semester language program (senior year) in Leningrad or Moscow. Residence in the Russian House for at least one year is advisable.

Requirements in the Major Subject: Three years (or the equivalent) of work in the Russian language, two years of work in the area of concentration (Russian literature, economics, history or philosophy) of which one must be at the advanced level, one year of work outside the area of concentration and Senior Conference. A paper based on sources in Russian is required for an advanced course in the area of concentration. A comprehensive examination in the Russian language and in the area of concentration is given.

Allied Subjects: Any language or literature, Economics, History, History of Art, Music and Philosophy.

001. *Elementary Russian:* Mr. Davidson.

The basic grammar is learned with enough vocabulary to enable the student to speak and understand simple Russian and to read simple texts. The course meets five times a week.

003. *Russian for the Sciences and the Humanities*: Mrs. Pearce.
First year of a two-year language sequence with primary emphasis on learning to read expository texts. The morphology and structure of the written language are learned along with a vocabulary common to all fields of knowledge. The course meets five times a week.
100. *Intensive Russian*. Offered on demand.
101. *Intermediate Russian*: Members of the Department.
Continuing grammar study, conversation and vocabulary building. Readings in Russian classics and contemporary materials. The course meets five times a week.
103. *Russian for the Sciences and Humanities*: Mrs. Pearce.
A continuation of 003. Advanced grammatical materials and the phraseology of various styles of expository writing are presented. Reading of advanced texts without translation and with maximum comprehension is stressed. The course meets five times a week.
200. *Advanced Training in the Russian Language*: Mr. Pahomov.
Intensive practice in oral and written expression based on literary and non-literary texts of Modern Standard Russian. Conducted in Russian.
201. *Readings in Russian*: Mrs. Pearce.
Reading of literary and non-literary texts, selected in accordance with the needs and interests of the students. Emphasis is placed on vocabulary building and exposure to varying styles to enable the student to read advanced texts in her own or related fields.
203. *Russian Literature in Translation*: Mr. Davidson.
A study of Russian literature from its beginnings. Readings in representative works in various schools and genres with special emphasis on the nineteenth and twentieth centuries. Offered in 1980-81 and alternate years.
- 204a. *Dostoevsky in Translation*: Mr. Pahomov.
Extensive readings in the varieties of psychological narrative explored by Dostoevsky with emphasis on close study of the major works with Russian and European contexts. Offered in 1981-82 and alternate years.
- 204b. *Tolstoy in Translation*: Mr. Davidson.
Readings of selected fictional and non-fictional works with emphasis on Tolstoy's struggle to adjust experiential and ideological perceptions of reality. Close analysis of texts and study of Tolstoy's Russian and European background. Offered in 1981-82 and alternate years.
302. *Pushkin and His Time*: Offered on demand.
- 303a. *Twentieth-Century Russian Literature*: Mr. Davidson.
Close readings of Russian poetry from the Symbolists to the present day. Offered in 1981-82 and alternate years.
- 303b. *Twentieth-Century Russian Literature*: Mr. Pahomov.
Close readings in Russian and Soviet prose from Gorky to the present day. Offered in 1981-82 and alternate years.
- 305c. *Advanced Russian Grammar*: Mrs. Baranova.
Intensive practice in speaking, reading and writing. Advanced training in

grammar and stylistics; study of texts of both literary and general cultural interest. With the addition of a third hour each week, the course may be taken as either 305a or 305b. Conducted in Russian.

- 306a. *Russian Prose and Poetry from Classicism to the Rise of Realism.*
A study of selected works of representative writers from Lomonosov to Gogol. Lectures and readings in Russian. Offered in alternate years.
- 306b. *Russian Literature of the Second Half of the Nineteenth Century.*
A study of selected prose writings of major Russian authors of the period. Lectures and readings in Russian. Offered in alternate years.
399. *Senior Conference: Members of the Department.*
The Senior Conference is intended to supplement course work. Format and topic vary from year to year according to the needs and interests of the students. The work of the conference will be evaluated by examination.
401. *Honors Work:*
Honors work is offered to students recommended by the department.

SEE ALSO

- Economics 206. *International Economic Theory and Policy:* Mr. Farley.
Economics 225. *Developing Economies:* Mr. Farley, Mr. Hunter.
Economics 236. *Topics in International Trade and Finance:* Mr. Farley.
Economics 306a. *Advanced International Economic Policy:* Mr. Farley.
Philosophy 333. *Russian Philosophy:* Mr. Kline.
Philosophy 334. *Marx and Russian Marxism:* Mr. Kline.

COURSES AT HAVERFORD

- Economics 211. *The Soviet System:* Mr. Hunter.
History 244. *Russian History:* Mrs. Gerstein.
History 245. *Russia in the Twentieth Century:* Mrs. Gerstein.
History 356. *Topics in Russian History:* Mrs. Gerstein.
History 480. *Independent Study.*

COURSES AT THE UNIVERSITY OF PENNSYLVANIA

- Philosophy 334. *History of Russian Thought and Culture: Varieties of Russian Marxism to 1917:* Mr. Kline.

Sociology

Professors: Judith R. Porter, Ph.D.

Eugene V. Schneider, Ph.D., *Chairman*

Associate Professor: Robert E. Washington, Ph.D.

Assistant Professor: Sheila Kishler Bennett, Ph.D.†

Assistant: Maria Brown, B.A.

The aim of the major in sociology is to provide the student with a general understanding of the structure and functioning of modern society, its major institutions, groups and values, and of the interrelations of these with personality. Stress is also placed on the major strains and problems of modern society.

The work of this program is integrated with the work in sociology offered at Haverford College. Students should inquire about the possibilities of coordinated work with Haverford, Swarthmore and the University of Pennsylvania.

Requirements for the Major Subject: Sociology 102a and b, 305b and 302a and additional work to be chosen from courses offered at Bryn Mawr or at Haverford. A total of three and one-half units of course work is required in addition to the Senior Conference. A total of 2 units of allied work is also required.

Allied Subjects: Anthropology, Economics, Social Psychology, Political Science, American and African History, Mathematics.

102a. *Introduction to Sociology:* Mrs. Porter.

Analysis of the basic sociological perspectives, methods and concepts used in studying society. Emphasis is placed on culture, social system, personality and their interrelations. Concrete applications of sociological analysis are examined.

102b. *American Social Structure:* Mr. Schneider.

Analysis of the structure and dynamics of complex industrial societies. Examples will be drawn from several societies, but major emphasis is on the United States.

202b. *Social Welfare and the Individual and the Environment:* Mrs. Woodruff.

Social welfare institutions as mediating the arrangements between the individual and the social environment. Three distinct functions of social welfare will be examined: social control, social change, and the linkage of services and clients. The historical development of social work practice in the U.S. up until the drafting of Social Security legislation in 1935 is also surveyed.

† On leave for the year 1980-81

- 205a. *Social Stratification*: Mrs. Bennett.
Distribution of wealth, power, authority, status and access to resources in contemporary industrial societies and in historical, comparative perspective. Class and class formation as structural and cultural phenomena. Gender as a principle of status differentiation specifically considered. Offered in alternate years.
- 207a. *Intergroup Relations*: Mrs. Porter.
An examination of cultural, structural and personality change with a focus on minority groups. Emphasis is on black-white and minority relations in the U.S.; there will be a cross-cultural comparison with race relations in South Africa.
- 209b. *Sociology of Religion*: Mrs. Porter.
Analysis of the interrelations between religion and society, drawing upon the works of major social theorists. Emphasis is placed on the connection between religious systems and secular culture, social structure, social change, secular values and personality systems. Offered in alternate years.
- 212b. *Sociology of Poverty*: Mrs. Porter.
An analysis of the causes and effects of poverty in the U.S. Issues covered will include the culture of poverty, the effects of poverty on institutions like the family, and the government poverty programs. Offered in alternate years.
- 217a. *Comparative Perspectives on Kinship*: Mrs. Bennett.
Kinship and domestic groups in contexts of socioeconomic change. Among perspectives and problems developed: evolutionary perspectives on the family and kinship, the impact of industrialization and urbanization (including the colonial experience), the black family, American kinship. Offered in alternate years.
- 218a. *Modernization*: Mr. Washington.
An introduction to major theoretical approaches to the socioeconomic problems confronting developing nations of Africa, Asia and Latin America; theories of modernization; the Western capitalist, the socialist and the Japanese problems of modernization; social consequences of colonization; feudalism and other pre-modern forms of social organization; the problems of urbanization; social class exploitation, rapid population growth, problems of political order.
- 240b. *Urban Sociology*: Mr. Washington.
(INT.) Analyses of urban social structures; the theoretical legacies of classical sociological theory and the Chicago school; demographic and ecological characteristics of American cities; ethnic and racial bases; stratification and political structures; crime and problems of social control; comparative analyses of selected third-world cities. Offered in alternate years.
- 243a. *Social and Cultural Change*: Mrs. Bennett.
Perspectives on social and cultural change examined with particular attention to underlying images of society and the individual, and the nature of social and cultural systems. Psychological modernity and diffusion theories

of cultural change are dealt with as they relate to transformations of institutional structures and political and economic relations; offered in alternate years.

245b. *Social Problems*: Mr. Washington.

(INT.) A survey of major problems in American society as seen by sociologists and social critics; an examination of analytical perspectives for understanding the sources and consequences of American social problems. Topics considered: crime, poverty, drug addiction, racism, urban crisis, sexism, health care and family disorganization.

255b. *The Sociology of Alienation*: Mr. Washington.

An examination of the phenomena of powerlessness, loss of meaning, estrangement, and inauthenticity from the standpoint of a variety of theoretical approaches; social conditions giving rise to and resulting from alienation; the relationship between alienation and deviant behavior; offered in alternate years.

302a. *Social Theory*: Mr. Schneider.

An examination of the extent to which the writings of classical and modern theorists throw light on wide-ranging social, cultural and historical processes.

305b. *Sociological Methods*: Mrs. Bennett.

(INT.) An examination of various techniques for conducting empirical inquiry in research design, collection of data, methods of interviewing and analysis.

306a. *Advanced Fieldwork Methods*: Mrs. Bennett.

(INT.) Participation in directed fieldwork. Sampling techniques and survey design, pre-testing, administration; coding and data preparation. Prerequisites: 305b or permission of instructor.

399. *Senior Conference*:

The form and evaluation of the conference will be determined in consultation with the senior majors.

401. *Honors Work*:

Honors work is offered to students who have demonstrated proficiency in their studies in the Department of Sociology and will consist of independent reading and research, conferences and the preparation of a written report.

Interdepartmental Work:

The Department of Sociology participates in the interdepartmental concentration in Hispanic and Hispanic-American Studies and in the interdepartmental major in The Growth and Structure of Cities. See pages 000, 000.

In general students may enroll for major credit in any course in the Department of Sociology and Anthropology at Haverford. Since alternative programs are possible, the student should consult the Department of Sociology at Bryn Mawr.

Spanish

Professor: Joaquín González-Muela, *D. en Fil.*

Willard Fahrenkamp King, Ph.D., *Chairman*

Associate Professor: Eleanor Krane Paucker, Ph.D.

Assistant Professor: Enrique Sacerio-Garí, Ph.D.

Visiting Lecturer in Hispanic Studies: Fernando Soler-Ríoeseo, Ph.D.

Professor of Philosophy: José María Ferrater Mora, *Lic. Fil.*

The major in Spanish offers work in both language and the literature of all centuries, with emphasis on those periods when Spain and Spanish America have made their maximum contributions to Western culture.

The introductory courses treat a selection of the outstanding works of Spanish and Spanish-American literature in various periods and genres. Students are placed in Spanish 100a or 101a according to the level of proficiency demonstrated on an examination given at entrance. Advanced courses deal more intensively with individual authors or periods of special interest. Students are admitted to advanced courses after satisfactory completion of two semesters of 200-level courses in Spanish literature or by a placement test and permission of the instructor. In certain cases, with the approval of the Department and the Dean of the Graduate School of Arts and Sciences, advanced students may also take one graduate course.

One course is devoted to training in written and spoken Spanish. It is recommended that students supplement their course work by spending the junior year in Spain or Spanish America, studying in the summer at the *Centro* (see page 54) in Madrid or living in the Spanish House. It is strongly advised that all students make use of the tapes available in the Language Laboratory. In Spanish 001 the use of the Laboratory forms an integral part of the course.

Requirements in the Major Subject: The usual course sequence in the major is Spanish 101a and b, 201a or b, 202a or b, at least four semesters of advanced work and the Senior Conference. Spanish 203b should also be included by students planning to study advanced courses in Spanish American literature. Students who spend the junior year in Spain may substitute an advanced literature course for Spanish 202a or 202b, and students whose pre-college training includes advanced work in literature may, with the permission of the Department, substitute a unit of more advanced work for 101a and b.

Allied Subjects: Any other language or literature, Anthropology, Economics, Hispanic Studies, History, History of Art, History of Religion, Linguistics, Music, Philosophy, Political Science and Sociology.

Requirements for a Minor in Spanish: Three units of course work in Spanish beyond the intermediate level.

001. *Elementary Spanish:* Mrs. Paucker, Mr. Sacerio-Garí.
Grammar, composition, oral and aural training, readings on the Spanish and Spanish-American background.
003. *Intermediate Spanish:* Mr. González-Muela, Mrs. King.
Intensive grammar reviews, exercises in composition and conversation, selected readings from modern Spanish texts.
- 100a. *Introduction to Literary Texts:* Mr. Sacerio-Garí.
Reading of Spanish and Spanish American works from various periods and genres (drama, poetry, short stories). Special attention to improvement of grammar and oral and written expression.
- 101a. *Readings in Hispanic Literature:* Mrs. Paucker; Mr. Burshatin (at Haverford).
& b. A general view of Spanish history and culture as revealed in outstanding literary works of various periods and genres. Oral expression and practice in writing are emphasized. Semesters alternate regularly between Bryn Mawr and Haverford.
- 201a. *Hispanic Literature of the Nineteenth Century:* Mrs. Paucker.
Poetry and prose from the Romantic Revolt to Bourgeois Realism: Larra, Espronceda, Galdós, Clarín and others. Consult semester course list.
- 201b. *The Generation of 1898 and Modernismo:* Mrs. Paucker.
The creation of new styles and new values by José Martí, Rubén Darío, Unamuno, Baroja and others. Consult semester course list.
- 202a. *Advanced Language Training and Composition:* Mr. Sacerio-Garí.
or b. Training in phonetics and practice in conversation. Interpretation of texts, translation and original composition in Spanish. Assignments adapted to the needs and level of achievement of the individual student.
- 203a. *Introduction to Spanish American Literature:* Mr. Sacerio-Garí;
or b. Mr. Williams (at Haverford).
A survey of Spanish American literature from the colonial period to modern times. Offered alternately at Bryn Mawr and Haverford.
- 204a. *Contemporary Spanish American Poetry:* Mr. Sacerio-Garí.
The revolution in poetic language since 1920. Major international and regional movements. Special attention to key figures: César Vallejo, Pablo Neruda, Octavio Paz. Offered in 1980-81 and alternate years.
- 208a. *The Mexican Novel since the Revolution of 1910:* Mrs. Paucker.
Primary attention is given to novels by Mariano Azuela, Juan Rulfo, Carlos Fuentes and others whose work reflects the social and political upheavals of revolutionary Mexico. Consult semester course list.
- 210b. *Hispanic Culture and Civilization:* Mrs. King.
INT.) See INT. 210a in the interdepartmental area of concentration in Hispanic and Hispanic-American Studies.

- 302a. *Medieval Spanish Literature*: Mrs. Paucker.
The Castilian epic, lyric, poetry, and narrative prose from the *Poema del Cid* to Jorge Manrique, with special attention to the intermingling of Arabic, Jewish and Christian cultures. Consult semester course list.
- 303a. *The Modern Novel in Spain*: Mr. González-Muela.
Twentieth-century experiments in the form and language of fiction. Emphasis on the contemporary period. Texts by Unamuno, Cela, Delibes, J. Goytisolo, and others. Offered in 1981-82 and alternate years.
- 303b. *Modern Poetry in Spain*: Mr. González-Muela.
Emphasis on the contemporary period. Texts by García Lorca, Hierro, Blas de Otero, and others. Offered in 1981-82 and alternate years.
- 304a. *Cervantes*: Mrs. King.
Primarily a study of *Don Quijote*—its structural innovations and its synthesis of the conflicting aesthetic and ideological currents of Cervantes' Spain. Offered in 1980-81 and alternate years.
- 304b. *Spanish Drama of the Golden Age*: Mrs. King.
Formal and thematic analysis of four major dramatists of the Spanish national theater: Lope de Vega, Tirso, Alarcón and Calderón. Offered in 1980-81 and alternate years.
- 350b. *Masters of the Short Story*: Mr. Sacerio-Garí.
Study of short fiction in Spanish America with special attention to the fantastic and the detective tale: Quiroga, Borges, Carpentier, Rulfo, Cortázar and Fuentes. Consult semester course list.
399. *Senior Conference*:
- In the first semester a senior seminar is devoted to the study of special topics in Spanish literature chosen by the students in consultation with the faculty, to be evaluated by a written examination in January.
 - In the second semester individual conferences between each student and her instructor are designed to aid the student in the preparation of a paper on an author or theme as seen in the context of a whole period in Spanish literature and history. At the end of the semester each student has a brief oral examination in Spanish consisting of the explanation and interpretation of a Spanish text and serving, along with the papers, as the method of evaluation of this conference. (With the approval of the Department, the student may substitute the Hispanic Studies seminar for the second-semester Senior Conference; see below and page 166.)
- 399b. *Hispanic Studies Senior Seminar*: Mrs. King, Mr. Soler-Rioseco.
(INT.) See INT. 399b in the interdepartmental area of concentration in Hispanic and Hispanic-American Studies.
401. *Honors Work*:
Honors work is offered to senior students recommended by the Department. This work consists of independent reading, conferences and a long paper.

Interdepartmental Work:

The Spanish Department participates in the interdepartmental area of concentration in Hispanic and Hispanic-American Studies. See page 166. The

Department also cooperates with the French and Italian Departments in the Romance Language Major. See page 163.

Teaching Certification:

A sequence of work offered by the Department of Spanish and the Department of Education of the College leads to a certificate to teach in the secondary schools of Pennsylvania.

COURSES AT HAVERFORD

- 205a. *Studies in the Spanish American Novel.*
- 211a. *The Medieval Spanish Ballad.* .
- 305b. *Prose of the Sixteenth and Seventeenth Centuries.*
- 310a. *Cortázar.*
- 313a. *Literature of the Caribbean.*
- 315b. *Spanish American Literature of Today.*
- 335b. *Spanish Lyric Poetry of the Sixteenth and Seventeenth Centuries.*
- 384b. *The Essay in Spanish America.*

For complete information about these courses, consult the Haverford catalog and semester course list.

Interdepartmental Work

As new fields of study open up and as old fields change, it becomes necessary for those interested in them to acquire the information and to learn the methods needed to understand them and to work in them, and these may sometimes be quite diverse. In order to provide an opportunity for students to work in these new areas, the faculty has approved the following interdepartmental majors and interdepartmental area of concentration. Similar kinds of interdepartmental courses are offered at Haverford College under General Program.

I. Interdepartmental Majors

CLASSICAL LANGUAGES

Major Advisers: Professor Lang (Greek)
Professor Scott (Latin)

The major in classical languages is designed for the student who wishes to divide her time equally between the two languages and literatures.

Requirements: Six units of course work in Greek and Latin, normally three of each. At least one unit of advanced course work but no allied units. A special Senior Conference will be made up from the offerings of the two departments. See pages 102 and 117 for descriptions of courses and conferences.

CLASSICAL STUDIES

Major Advisers: Professor Lang (Greek)
Professor Scott (Latin)
Professor Ridgway
(Classical and Near Eastern Archaeology)

The major in classical studies will provide a broad yet individually structured background for students whose interest in the ancient classical world is general, and who wish to lay the foundation for more specialized work in one particular area.

Requirements: Eight units of course work, at least one in each of the following: ancient history (History 204a, 205a, 206a and b), ancient philosophy (Philosophy 101a or b, 231a, 232b), classical archaeology (Classical and Near Eastern Archaeology 101, 202a, 203a, 203b, 205b, 301a, 302a,

302b, 304b, Greek (all courses except 213a and 215b), Latin (all courses except 204a and 205a and b). At least one unit of advanced work is required, but no allied work. The Senior Conference will be in two parts: one in the field of the advanced unit and a special Classical Studies Conference on some topic to which all fields may contribute. (Equivalent courses may be taken at Haverford College with the approval of the major advisers.)

ROMANCE LANGUAGES

The Departments of French, Italian, and Spanish cooperate in offering a major in Romance Languages which requires advanced work in at least two Romance Languages and literatures. Additional work in a third language and literature is suggested.

Requirements:

A minimum of 4½ units of work in the first language and literature (if Italian is chosen, only 4 units) and 3 units in the second language and literature. Students should consult with their advisers no later than their sophomore year in order to select courses in the various departments which complement each other.

The following sequence of courses is recommended when the various languages are chosen for primary and secondary concentration respectively (see departmental listings for course descriptions):

	1st Language and Literature	2nd Language and Literature
I. French	<i>French 101</i> <i>French 205c</i> <i>French 201a</i> <i>French 202a</i> <i>French 204a or 203a</i> 2 300-level courses in literature	<i>French 101</i> <i>French 205c</i> <i>French 201a or 204a</i> 1 300-level course in literature
II. Italian	<i>Italian 102a or 101</i> <i>Italian 201b</i> <i>Italian 301a</i> <i>Italian 303a and b</i> 1 or 2 literature courses (2 if 102a is chosen) at the 200 or 300 level	<i>Italian 102a or 101</i> <i>Italian 201b</i> <i>Italian 301a</i> 1 or 2 literatures courses (2 if 102a is chosen) at the 200 or 300 level
III. Spanish	<i>Spanish 101</i> <i>Spanish 202a or b</i> <i>Spanish 201a</i> <i>Spanish 304a or 302a</i> 3 literature courses, of which 2 must be taken at the 300 level	<i>Spanish 101</i> <i>Spanish 202a or b</i> <i>Spanish 304a or b</i> 1 literature course at the 200 or 300 level

Senior Conference:

One semester of work in each of the two languages chosen and an oral examination (following the current model in the various departments) in either one of the two languages, according to the student's preference. The senior conference in both semesters will include consideration of comparative Romance topics.

Honors Work:

One full unit of work following the current model in the various departments but dealing with the literature of both the first and the second language.

Interdepartmental Courses:

The cooperating departments offer from time to time courses at the 200 or 300 level, conducted in English, on such comparative Romance topics as epic, romanticism, or literary vanguard movements of the twentieth century. Students should be able to read texts in two of the languages in the original.

THE GROWTH AND STRUCTURE OF CITIES

Major Adviser and Director of the Program: Professor Barbara Miller Lane

Visiting Lecturer: Fernando Soler-Río seco

In this interdisciplinary major, the student will study the city from several points of view. City planning, art and architecture, history, political science, anthropology, archaeology, economics and sociology will contribute toward her understanding of the growth and structure of cities.

Requirements: All students must take Interdepartmental 190 and Interdepartmental 200b (one and one-half units). Each student should select, in addition to these courses, three units from among the other major courses listed below. Two additional units, usually above the introductory level, must be chosen from any one department listed under Allied Subjects. Each senior will prepare a paper or project embodying substantial research. The paper or project will be presented in written form to the Committee on the Growth and Structures of Cities and in oral or visual form to all seniors in the major, meeting as a group. These oral presentations and the resulting discussions will serve as the Senior Conference.

Allied Subjects: Anthropology, Fine Art, Classical and Near Eastern Archaeology, Economics, Greek, History, History of Art, Latin, Political Science, Sociology. Occasionally, with the permission of the Dean of the Graduate School, courses in Social Work and Social Research.

190. *The Form of the City:* Mrs. Lane.
(INT.) The physical character of historic and contemporary cities. A variety of factors—geography, economic and population structures, planning and

aesthetics—will be considered as determinants of urban form. Alternate years.

200b. *Urban Society*: Mrs. Lane, Mr. Ross.

INT.) The techniques of the social sciences as tools for studying historical and contemporary cities, considering such topics as ethnicity, the role of neighborhoods and local communities, and participation. Alternate years.

204a. *The Ancient City*: Mr. Scott.

INT.) See Latin 204a. Offered on demand.

206b. *Architecture and Cities of the Ancient Near East*: Mr. Ellis.

INT.) See Classical and Near Eastern Archaeology 206b.

207a. *Latin America: Colonies and Revolutions*: Mrs. Dunn.

INT.) See History 207a. Offered on demand.

207b. *Ancient Greek Cities and Sanctuaries*: Mr. Wright.

INT.) See Classical and Near Eastern Archaeology 207b. Alternate years.

215a. *Urban Economics*: Mr. Dixon (at Haverford).

INT.) See Economics 215a.

220a. *Survey of Western Architecture*: Mrs. Lane, Mrs. Kinney.

INT.) The major traditions in western architecture will be illustrated through detailed analysis of selected examples from classical antiquity to the present. The course will deal with the evolution of architectural design and building technology, as well as with the larger intellectual, aesthetic and social context in which this evolution occurred. Alternate years.

221b. *United States Economic Development*: Mr. Du Boff.

INT.) See Economics 221b.

224a. *Economic History and Growth, 1750-1970*: Mr. Du Boff.

INT.) See Economics 224a. Alternate years.

240b. *Urban Sociology*: Mr. Washington.

INT.) See Sociology 240b.

245b. *Social Problems*: Mr. Washington.

INT.) See Sociology 245b.

295b. *Paris in the Seventeenth and Eighteenth Centuries*: Miss Lafarge.

INT.) See French 295b. Alternate years.

300b. *The American City in the Twentieth Century*: Mr. Speizman.

INT.) (Graduate School of Social Work and Social Research)

Social transformations under the impact of rapid urbanization. Includes some comparative study of urbanization in other societies. Alternate years.

302a. *Greek Architecture*: Mr. Wright.

INT.) See Classical and Near Eastern Archaeology 302a.

302b. *Roman Architecture*: Mr. Scott.

See Classical and Near Eastern Archaeology 302b.

304a. *The Dynamics of Environmental Systems*: Mr. Anderson.

INT.) See Chemistry 304a. Alternate years.

307b. *Medieval Cities: Islamic, Byzantine and Western*: Mr. Brand.

INT.) See History 307b. Alternate years.

318a. *Urban Political Conflict*: Mr. Ross.

INT.) See Political Science 318a. Alternate years.

- 328b. *Colonial Towns in North and South America*: Mrs. Dunn.
(INT.) See History 328b.
- 335a. *A History of Blacks in the American City*: Mr. Holbrook.
(INT.) See History 335a. Alternate years.
- 350b. *Topics in the History of Modern Architecture*: Mrs. Lane.
(INT.) Selected aspects of the history of modern architecture, such as housing, public buildings, industrial buildings, will be studied in detail. The course concentrates on actual building types, rather than on the design ideas of a few great architects. A reading knowledge of French or German is desirable. Alternate years.
399. *Senior Conference*: Mrs. Lane and members of the Committee on the Growth and Structure of Cities.

COURSES AT SWARTHMORE

- 54a. *The City*: Professor Kitao.
Analytical study of visual and physical aspects of the man-made environment: buildings as signs and the spaces between them. Topics include the anatomy of space, urban iconography, dwelling and social behavior, cities and streets in history, theories of design and planning, and preservation, with special emphasis on Rome, London, Paris and Philadelphia.
- 55a. *Philadelphia: City and Architecture*: Professor Kitao.
Architecture and urban forms, focusing on Philadelphia, in relation to the Europe of Neoclassicism, Georgian and Victorian London, Paris of the Second Empire, the Chicago School, the International Style and Post-Modernism; topics include: Orthogonal planning, William Penn's idealism, the row house phenomenon, the Centennial Exhibition, urban renewal and historic preservation.

II. Interdepartmental Area of Concentration

HISPANIC AND HISPANIC-AMERICAN STUDIES

Major Advisers: Professor Dunn (History)
Professor King (Spanish)
Professor Soler-Ríoeseo (Hispanic Studies)

The program is designed for students interested in a comprehensive study of the society and culture of Spanish America or Spain or both. Its aims are (1) to provide the student, through a formal major in anthropology, history, history of art, history of religion, economics, music, political science, sociology or Spanish, with a valid means for thorough study of one aspect of Hispanic or Hispanic-American culture, (2) to afford an introduction, through the study of allied courses dealing with Spain or

Spanish America, to other aspects of the cultural complex, (3) to effect a synthesis of the student's studies through a Senior Conference, in which all students in the program participate, on a broad topic that cuts across all the major areas involved.

Requirements: Competence in Spanish; a major chosen from those listed above; Hispanic Studies 210a; at least two units of work chosen from courses listed below (or from approved courses taken in Spain or Spanish America); in the junior or senior year, a long paper or project dealing with Spain or Spanish America; the Senior Conference in Hispanic and Hispanic-American Studies. (In effect, the student supplements a major in one of the departments listed above with a concentration in Hispanic or Hispanic-American studies.) Students should consult their advisers no later than the sophomore year in order to select courses which complement each other.

- 210b. *Hispanic Culture and Civilization:* Mrs. King.
(INT.) A brief survey of the political, social and cultural history of Spain and Spanish America, concentrating on the emergence of specifically Hispanic values and modes of life. Major topics: spread of the Spanish Empire, Spanish-American Independence, racial and ethnic conflict, current social and economic problems, Spanish America's recent attempts to define its own identity.
- 399b. *Senior Conference:* Major Advisers.
Topic for study chosen each year after consultation between students and faculty. This conference replaces, if the student so chooses, one of the senior conferences in the major subject.
- Courses:* Anthropology 101, 305a, 306b, 313a, INT. 308, INT. 310a, INT. 312b, INT. 315a; Economics 232b; History 207a, 211b, 212, 307b, 308a, INT. 317a, INT. 328a, H355a; History of Art 213; History of Religion 104a, 300b; Philosophy 314b; Political Science H335a, 340b; Sociology 102a, Spanish: any course (including those given at the Centro de Estudios Hispánicos in Madrid) except 001, 003 and 202.

III. Interdepartmental Courses

Each year, certain courses are offered which cut across well-defined areas of knowledge and emphasize relationships among them. Such courses may be taught by two or more members of the faculty working in close cooperation. Many interdepartmental courses are open to all students without prerequisite. For students who have progressed to the more complex aspects of their major subjects, advanced interdepartmental courses provide an opportunity to apply their training to new and broader problems and to benefit from the experience of seeing their own subject from the points of view of several specialists.

190. *The Form of the City*: Mrs. Lane.
(INT.) See Growth and Structure of Cities or History.
- 200b. *Urban Society*: Mrs. Lane, Mr. Ross.
(INT.) The techniques of the social sciences as tools for studying historical and contemporary cities, considering such topics as ethnicity, the role of neighborhoods and local communities, and participation. See Growth and Structure of Cities or History.
- 204a. *The Ancient City*: Mr. Scott.
(INT.) See Latin.
- 206b. *Architecture and Cities of the Ancient Near East*: Mr. Ellis.
(INT.) See Classical and Near Eastern Archaeology.
- 207a. *Latin America: Colonies and Revolution*: Mrs. Dunn.
(INT.) See History.
- 207b. *Ancient Greek Cities and Sanctuaries*: Mr. Wright.
(INT.) See Classical and Near Eastern Archaeology.
- 210b. *Hispanic Culture and Civilization*: Mrs. King.
(INT.) See INT. 210b in the interdepartmental area of concentration in Hispanic and Hispanic-American Studies.
- 211a. *The Soviet System*: Mr. Hunter (at Haverford).
(INT.)
- 213a. *Myth in Practice and Theory*: Miss Lang.
(INT.) Myths of various cultures will be examined from two points of view: as a testing ground for various approaches to the study and interpretation of myths, both ancient and modern; as raw material for literary exploitation and development. Consult semester course lists.
- 215a. *The Ancient Stage*: Mr. Hamilton.
(INT.) See Greek.
- 216a. *Women in the Middle Ages*: Mr. Brand, Mrs. Savage.
(INT.) See History or French.
- 218b. *Conflict and Conflict Management: A Cross-Cultural Approach*: Mr. Ross.
(INT.) See Political Science or Anthropology.
- 220a. *Survey of Western Architecture*: Mrs. Kinney, Mrs. Lane.
(INT.) See Growth and Structure of Cities or History of Art.
- 240b. *Urban Sociology*: Mr. Washington.
(INT.) See Sociology.
- 245b. *Social Problems*: Mr. Washington.
(INT.) See Sociology.
- 250b. *Germanic Mythology*: Mr. Jaeger.
(INT.) See German.
290. *La Civilisation française*: Mr. Guggenheim; Mr. McCarthy (at Haverford).
(INT.) See French or History.
- 295b. *Paris in the Seventeenth and Eighteenth Centuries*: Miss Lafarge.
(INT.) See French.
- 297a. *L'Histoire à l'époque romantique: historiens, auteurs dramatiques, romanciers*: Mr. Salmon.
(INT.) See French or History.

- 300b. *The American City in the Twentieth Century*: Mr. Speizman.
(INT.) See Growth and Structure of Cities or History.
- 302a. *Greek Architecture*: Mr. Wright.
(INT.) See Classical and Near Eastern Archaeology.
- 302b. *Roman Architecture*: Mr. Scott.
(INT.)
- 303b. *Introduction to Celtic Civilization*: Miss Dorian.
(INT.) The course will trace the thread of Celtic civilization from the emergence of the Celts in pre-history to their marginal survival in modern times, concentrating on the contributions of mythology, the bardic tradition and the legal system to the uniqueness of Celtic society, and on the ancient continuities to be found in surviving Celtic folk custom and tradition. Offered in 1980-81.
- 304a. *The Dynamics of Environmental Systems*: Mr. Anderson.
(INT.) See Chemistry.
- 305a. *The Italian City-State in the Renaissance*: Mrs. Lane.
(INT.) See History.
- 305b. *Sociological Methods*: Mrs. Bennett.
(INT.) See Sociology.
- 306a. *Advanced Field Work Methods*: Mrs. Bennett.
(INT.) See Sociology.
- 307b. *Medieval Cities: Islamic, Byzantine and Western*: Mr. Brand.
(INT.) See History.
- 308a. *Language in the Social Context*: Miss Dorian.
& b. Language considered as a social phenomenon. Topics considered include:
(INT.) human as compared with animal communication; childhood language acquisition; bilingualism in individuals and in societies; regional dialects; pidgins and creoles and other language-contact phenomena; language engineering; usage and the notion of "correctness"; social dialects and their consequences; speech behavior in other cultures; the relationship between language and thought. Offered in 1980-81.
- 310a. *Introduction to Descriptive Linguistic Techniques*: Miss Dorian.
(INT.) An introduction to techniques of synchronic descriptive linguistic analysis: typology, phonetics, phonemics, morphemics, and syntax. Intensive drill in phonetic production and transcription; problems in phonology and morphology. A prerequisite for Interdepartmental 312b. Offered in 1981-82.
- 311b. *Diachronic Linguistics*: Miss Dorian.
An introduction to historical linguistics: the reconstruction of prehistoric linguistic stages; the establishment of language families and their inter-relationships; types of linguistic change and theories of the origin of language change. Pertinent materials will be drawn from a variety of languages, but the history of the English language, as the language common to all participants, will be central. Offered in 1981-82.
- 315a. *Language Learning and Teaching*: Miss Dorian.
(INT.) An introduction to applied linguistics, with special consideration given to topics such as: language aptitude and what it may consist of; various lan-

guage teaching methodologies and their advantages and disadvantages; error analysis; first language acquisition as compared with second language acquisition; individual and societal bilingualism; bilingual education in various forms. Offered in 1980-81.

317a. *Mexico: Independence to the Present*: Mrs. Dunn.

(INT.) See History.

318a. *Urban Political Conflict*: Mr. Ross.

(INT.) See Political Science.

324. *Revolutionary Europe 1789-1848*: Mr. Silvera.

(INT.) See History or French.

328b. *Colonial Towns in North and South America*: Mrs. Dunn.

(INT.) See History.

330. *France since 1870*: Mr. Silvera.

(INT.) See History or French.

312b. *Field Methods in Linguistics*: Miss Dorian.

Practical experience in transcription and analysis of an unfamiliar language. There will be an informant, and students will be able to develop their own techniques for approaching a language with which they have no previous experience. Interdepartmental 310a is a prerequisite. Offered in 1981-82.

335a. *A History of Blacks in the American City*: Mr. Holbrook.

(INT.) See History.

350a. *Topics in the History of Modern Architecture*: Mrs. Lane.

(INT.) See Growth and Structure of Cities.

353a. *Biochemistry: Macromolecular Structure and Function*: Mr. Prescott, Mr. Strothkamp.

See Biology.

353b. *Biochemistry: Intermediary Metabolism*: Mr. Conner, Mr. Prescott.

(INT.) See Biology.

355b. *Topics in Early Modern European History*: Mr. Spielman (at Haverford).

(INT.)

356a. *Topics in Modern European History*: Mrs. Gerstein (at Haverford).

357a. *Computer Usage in the Life Sciences*: Mrs. Pruett, Mr. Pruett.

& b. See Biology.

(INT.) See Physics.

358b. *Topics in Medieval History*: Mr. McKenna (at Haverford).

360. *England under the Tudors and Stuarts*: Mrs. Foster.

A study of the life and institutions of the English people, 1509-1714. Students will make extensive use of primary source materials. Offered in 1981-82 and alternate years.

362. *France, 1559-1661*: Mr. Salmon.

(INT.) See History or French.

370b. *The Great Powers and the Middle East*: Mr. Silvera.

See History.

393b. *Self-Portrait of England in the Sixteenth and Seventeenth Centuries*:

(INT.) Mrs. Foster.

See History.

IV. Women's Studies

The following courses focus on women in history, literature, or society. Consult the course listings under specific departments for descriptions.

Anthropology 105a.: *Sex, Culture and Society*

Anthropology 325b: *Women, Culture and Society*

English 269: *Women Writing in America*

English 358a: *Jane Austen and Charlotte Brontë*

English 358b: *"Women of Talents"*

French 303a: *La Vision de la femme dans la littérature française*

History 214b: *History of Women in America*

Sociology 217a: *Comparative Perspectives on Kinship*

Interdepartmental 216a: *Women in the Middle Ages*

Students may also wish to consider the following courses, in which the study of women, or of sex and gender roles, plays a significant part:

Anthropology 302a: *Africa: Sub-Saharan Ethnology*

A study of selected Sub-Saharan societies and cultures, illustrating problems in ethnography.

Anthropology 303b: *Oceania: Topics in Melanesian Ethnography*

An intensive study of selected Melanesian cultures and societies.

Anthropology 303a: *Latin America: Native Cultures of South America*

Anthropology 321b: *Psychological Anthropology*

Approaches to an understanding of culture through study of cultural factors in the development of human personalities, and individual experiences in different socio-cultural settings.

Education 201b: *The Social Foundations of Education*

Examines sex differences in school settings.

Education 202b: *History and Philosophy of Education*

Examines the history of women's education.

Education 207b: *Adolescent Development*

Addresses sex differences.

Education 301a: *Principles of Teaching in the Secondary School*

Sex roles, teachers' relations to students, sex stereotyping in textbooks.

English 259a and 259b: *The Eighteenth- and Nineteenth-Century Novel*

These courses emphasize the contributions of such women writers as Fanny Burney, Maria Edgeworth, Jane Austen, Emily Brontë, Charlotte Brontë, George Eliot and Elizabeth Gaskell.

History 275: *History of American Society, 1607-1830*

This course analyzes the development of families, communities and economies in America between 1607-1830.

Italian 201b: Novel and Poetry of Modern Italy

This course includes the contributions of women writers to the development of modern Italian literature. Authors studied include Dacia Maraini, Alba de Cespedes, Elsa Morante and Natalia Ginzburg.

Italian 207b: Dante, Petrarch and Boccaccio in Translation

The study of Petrarch and Boccaccio will include the central role of women in their works.

Russian 303a: Twentieth-Century Russian Literature

This course includes special emphasis on prominent female poets in 20th Century Russia: Gippius, Akhmatova, Tsvetaeva, and the contemporary Soviet Feminist Akhmadulina.

Sociology 102a: Introduction to Sociology

Socialization and gender role identification, women in society and the economy considered from a sociological perspective.

Sociology 205a: Social Stratification

Gender as a principle of status differentiation and labor market segregation explicitly considered.

Sociology 243a: Social and Cultural Change

Women in economic development considered in historical and non-western context. Opportunity provided for research on social change and women in contemporary society.

Sociology 245b: Social Problems

Sexism considered as a social problem.

The following graduate seminars are open to qualified undergraduates. Permission must be obtained from the appropriate department and the graduate dean.

Sex Roles (Department of Anthropology)

Topics in the Ethnography of Oceania—Melanesia, Polynesia, Australia
(Department of Anthropology)

Psychological Anthropology (Department of Anthropology)

Women and Social Policy

(Graduate School of Social Work and Social Research)

This course explores various aspects of the situation of women in contemporary American society. Social policies with particular relevance for women are examined, and women are discussed as both consumers and providers of social services. Among the specific areas covered are AFDC and other income maintenance strategies, the women's health movement, family planning policies, child care and other policies affecting working women. Particular attention is paid to the situation of minority women.

V. General Programs

COURSES AT HAVERFORD

The courses in this program are under the direction of the Committee on General Programs: Professor Harvey Glickman, Chairman.

These courses are offered by members of the various departments of the College with a distinct focus upon the student who is a non-major. They may be thoroughly introductory in approach and undirected toward further work in the major; or, in another mode entirely, they may attempt to bring the insights and techniques of one discipline to bear on the problems important to another. They attempt to introduce students to intellectual experiences which diverge from the ones they might otherwise choose. They have no prerequisites except where explicitly stated. Consult the Haverford College catalogue for course listings and descriptions.

Physical Education

Director: Jenepher P. Shillingford, M.Ed.

Assistant Director: Linda Fritsche Castner, M.S.

Instructors: Linda Caruso Haviland, M.Ed.

Elaine E. Johnson, M.S.

Paula Carter Mason, B.S.

Leigh Straub, B.S.

Lee Wallington, B.S.Ed.

The Department of Physical Education has developed a program to:

1. Recognize the student with a high degree of neuromuscular coordination and physical stamina and encourage her to maintain this status.
2. Provide incentive for all students to find some form of activity in which they may find pleasure and show improvement.
3. Contribute to the total well-being of the student.

There is a two-year requirement to be completed preferably by the end of the sophomore year. Each student will participate two hours a week in an activity of her choice. Each semester is divided into two terms in order that the student may participate in a variety of activities should she wish to do so.

All students must complete the freshman and sophomore requirements satisfactorily. Upperclassmen are invited to elect any of the activities offered. Transfer students will have their physical education requirement reviewed by the Director of Physical Education.

The Optional Test for Release

The program provides a Physical Education Profile Test optional for freshmen and sophomores. Above-average performance releases the student from physical education for one year.

Areas contributing to a physical education profile to be determined by testing, using standardized tests and procedures adapted to college women, are:

1. Aptitude and Achievement Battery (performance skill)
 - a. Standing long jump
 - b. Standbag throw
 - c. Obstacle course
2. Fitness Battery (strength and endurance)
 - a. Standing long jump
 - c. Push-ups—modified
 - b. Sit-ups
 - d. 12-minute run

The Swimming Test (for survival)

1. Jump into deep end of pool (feet first entry), demonstrate two strokes while swimming lengths of pool for ten minutes without stopping, resting or touching bottom or sides of pool, backfloat motionless for two minutes, tread water one minute.
2. The swimming test is administered to every new student at the beginning of the year unless she is excused by the College Physician.
3. Students unable to pass the test must register for beginning swimming.

Seasonal Offerings

Fall: archery, ballet, modern dance, golf, hockey, soccer, swimming, tennis, Nautilus, slimnastics, volleyball, Advanced Life Saving, jogging and trampoline.

Winter: badminton, basketball, modern dance, ballroom dancing, fencing, gymnastics, swimming, volleyball and American Red Cross Water Safety Instructor Training Course.

Spring: archery, modern dance, golf, gymnastics, lacrosse, swimming, tennis, trampoline, Advanced Life Saving and jogging.

A Modern Dance Club and Varsity teams are open to students with special interests in those areas.

The Department of Physical Education and the Haverford Department of Athletics allow students to choose activities on either campus towards fulfillment of requirements.

Scholarship Funds and Prizes

The scholarships and prizes listed below have been made available to able and deserving students through the generosity of alumnae and friends of the College. Many of them represent the income on endowed funds which in some cases is supplemented by an additional grant, usually taken from expendable gifts from alumnae and parents. A student requesting aid does not apply to a particular fund but is considered for all awards administered by the College for which she is qualified.

The Alumnae Regional Scholarship program is the largest single contributor to Bryn Mawr's scholarship awards. Bryn Mawr is the only college with an alumnae-based scholarship program independent of, yet coordinated with, the College's own financial aid program. The Alumnae raise funds, interview candidates requesting and needing aid, and choose their scholars. An Alumnae Regional Scholarship carries with it special significance as an award for both academic and personal excellence.

An outstanding scholarship program has been established by the National Merit Scholarship Corporation, and several large corporations sponsor scholarship programs for children of employees. In addition to the generous awards made by these companies there are many others made by foundations and by individual and professional groups. Some of these are regional in designation. Students are urged to consult their schools and community agencies for information in regard to such opportunities.

Bryn Mawr College participates as a sponsor in the National Achievement Scholarship program. As sponsor, the College awards several scholarships through the National Merit Corporation. National Achievement finalists who have indicated that Bryn Mawr is their first choice institution will be referred to the College for consideration for this award.

SCHOLARSHIP FUNDS

The Mary L. Jobe Akeley Scholarship Fund was established by bequest of Mary L. Jobe Akeley. It is for undergraduate scholarships with preference being given to students from Ohio. (1968)

The Alumnae Bequest Scholarship Fund was established by bequests received for scholarships from alumnae of the College. (1965)

Alumnae Regional Scholarships are available to students in all parts of the United States and Canada. These scholarships, raised by alumnae, vary in amount and may be renewed each year. The awards are made by local alumnae committees. Holders of these scholarships who maintain a high standard of academic work and conduct, and who continue to need financial aid after the freshman year, are assured assistance either from alumnae committees in their districts or from the College. (1922)

Note: The dates in parentheses in the listings on this and the following pages indicate the year the scholarship was established.

The Marion Louise Ament Scholarship Fund was established by bequest of Berkley Neustadt in honor of his daughter Marion Louise Ament of the Class of 1944. ((1967)

The Evangeline Walker Andrews May Day Scholarship was established by bequest of Evangeline Walker Andrews of the Class of 1893. The income from this fund is to be used for undergraduate scholarships in the Department of English. Mrs. Andrews originated the Bryn Mawr May Day which was first held in 1900. (1963)

The Edith Heyward Ashley and Mabel Pierce Ashley Scholarship Fund was founded by bequest of Mabel Pierce Ashley of the Class of 1910 and increased by bequest of Edith Heyward Ashley of the Class of 1905. The income is to be awarded as scholarships to undergraduate students majoring in History or English. (1963)

The Elizabeth Congdon Barron Scholarship Fund. In 1960, by Mrs. Barron's bequest, the Elizabeth Congdon Barron Fund was established "for the general purposes of the College." Through gifts from her husband Alexander J. Barron the fund was increased and the Elizabeth Congdon Barron Scholarship Fund was established. (1964)

The Elizabeth P. Bigelow Memorial Scholarship Fund was established by gifts from Mrs. Henry B. Bigelow in memory of her daughter, Elizabeth P. Bigelow, who was graduated *cum laude* in 1930. (1960)

The Star K. Bloom and Estan J. Bloom Scholarship Fund was established by a gift from Star K. Bloom of the Class of 1910 and her husband, Estan J. Bloom. The income is to be awarded to academically superior students from the southern part of the United States with preference being given to residents of Alabama. (1976)

The Book Shop Scholarships are awarded annually from the income from the Book Shop Fund. (1947)

The Bertha Norris Bowen and Mary Rachel Norris Memorial Scholarship Fund was established by bequest under the will of Mary Rachel Norris of the Class of 1905 in memory of Bertha Norris Bowen, who was for many years a teacher in Philadelphia. (1973)

The James W. Broughton and Emma Hendricks Broughton Scholarship Fund was established by a bequest from the estate of Mildred Hendricks Broughton of the Class of 1939 in honor of her parents. The students selected for such financial aid shall be from the midwestern part of the United States. (1972)

The Hannah Brusstar Memorial Scholarship Fund was established by a bequest from the estate of Margaret E. Brusstar of the Class of 1903. The income from this fund is to be awarded annually to an undergraduate student who shows unusual ability in Mathematics. (1976)

The Bryn Mawr Alumnae Physicians Fund for Premedical Students was established under the sponsorship of two alumnae Directors of the College.

The income from this fund is to provide a flexible source of financial help to women at Bryn Mawr who have decided to enter medicine, whether or not they choose to major in physical sciences. (1976)

Bryn Mawr at the Tenth Decade. A pooled fund was established in the course of the Tenth Decade Campaign for those who wished to contribute to endowment for undergraduate student aid.

The Mariam Coffin Canaday Scholarship Fund was established by a gift from the Ward M. and Mariam C. Canaday Educational and Charitable Trust. The income from this fund is to provide scholarships with preference given to students from Toledo, Ohio, or from District VI of the Alumnae Association. (1962)

The Antoinette Cannon Memorial Scholarship Fund was established by a gift from Janet Thornton of the Class of 1905 in memory of her friend Antoinette Cannon of the Class of 1907. (1963)

The Jeannette Peabody Cannon Memorial Scholarship Fund was established in memory of Jeannette Peabody Cannon, Class of 1919, through the efforts of the New England Alumnae Regional Scholarship Committee, of which she was a member for twenty years. The scholarship is awarded every three years on the nomination of the Alumnae Scholarship Committee to a promising member of the freshman class, residing in New England, who needs financial assistance. The scholarship may be held during the remaining three years of her college course provided a high standard is maintained. In 1962 the fund was increased by a generous gift from Mrs. Donald Wing of New Haven. (1949)

The Susan Shober Carey Award was founded in memory of Susan Shober Carey by gifts from the Class of 1925 and is awarded annually by the President. (1931)

The Florence and Dorothy Child Memorial Scholarship of Bryn Mawr College was founded by bequest of Florence C. Child of the Class of 1905. The income from this fund is to be used for the residence fees of students who without such assistance would be unable to live in the halls. Preference is to be given to graduates of the Agnes Irwin School and to members of the Society of Friends. If no suitable applicants are available in these two groups, the scholarship aid will then be assigned by the College to students who could not live in residence halls without such assistance and who are not holding other scholarships. (1957)

The Augusta D. Childs Scholarship Fund was established by bequest from the estate of Augusta D. Childs. (1970)

The Jacob Orie and Elizabeth S. M. Clarke Memorial Scholarship was established by bequest from the estate of Elizabeth Clarke and is awarded annually to a student born in the United States or any of its territories. (1948)

The Class of 1903 Scholarship Fund was established by a gift on the occasion of the fiftieth reunion of the Class. The income from this fund is to be awarded annually to a member of the freshman, sophomore or junior class for use in the sophomore, junior or senior years. (1953)

The Class of 1922 Memorial Scholarship Fund was established at the suggestion of members of the Class of 1922 as a perpetual class fund to which members of the Class can continue to contribute. (1973)

The Class of 1943 Scholarship Fund was established by gifts from the James H. and Alice I. Goulder Foundation Inc. of which Alice Ireman Goulder of the Class of 1943 and her husband are officers. Members of the Class of 1943 and others add to the fund which continues to grow, and it is hoped that eventually the yearly income will provide full scholarship aid for one or more students at Bryn Mawr. (1974)

The 1967 College Bowl Scholarship Fund of \$16,000 was established by the Bryn Mawr College team from its winnings on the General Electric College Bowl television program. The scholarship grants were donated by the General Electric Company and by *Seventeen* magazine and supplemented by gifts from the Directors of the College. The members of the team were Ashley Doherty (Class of 1971), Ruth Gais (Class of 1968), Robin Johnson (Class of 1969) and Diane Ostheim (Class of 1969). Income from this fund is awarded to an entering freshman in need of assistance. (1967)

The Julia Cope Collins Scholarship was established by bequest from the estate of Julia Cope Collins, Class of 1889. (1959)

The Alice Perkins Coville Scholarship Fund was established by Agnes Frances Perkins of the Class of 1898 in honor of her sister, Alice Perkins Coville. (1948)

The Regina Katharine Crandall Scholarship was established by a group of her students as a tribute to Regina Katharine Crandall, Margaret Kingsland Haskell Professor of English Composition from 1918 to 1933. The income from this fund is awarded to a sophomore, junior or senior who in her written English has shown ability and promise and who needs assistance to continue her college work. (1950)

The Louise Hodges Crenshaw Memorial Scholarship Fund. The Army Emergence Relief Board of Managers approved a gift of \$10,000 representing a part of a bequest to them from Evelyn Hodges, Mrs. Crenshaw's sister. The income is to be used to provide scholarships for dependent children of Army members meeting AER eligibility requirements. (1978)

The Annie Lawrie Fabens Crozier Scholarship Fund was established by a gift from Mr. and Mrs. Abbott P. Usher in memory of Mrs. Usher's daughter, Annie Lawrie Fabens Crozier of the Class of 1951. The scholarship is to be awarded to a junior or senior of distinction who is majoring in English. (1960)

The Rebecca Taylor Mattson Darlington Memorial Scholarship Fund was established by members of her family in memory of Rebecca Taylor Mattson Darlington, Class of 1896. (1967)

The E. Merrick Dodd and Winifred H. Dodd Scholarship Fund was established by bequest of Dr. and Mrs. Dodd. (1953)

The Abby Slade Brayton Durfee Scholarship Fund was founded in honor of his wife by bequest of Randall N. Durfee. Mrs. Charles Bennett Brown of the Class of 1930 and Randall N. Durfee, Jr. have added to the fund. Preference is given to candidates of English or American descent and to descendants of the Class of 1894. (1924)

The Ida L. Edlin Scholarship Fund was established by a bequest from the estate of Ida H. Edlin. The income is to be used for scholarships for deserving students in fine arts or humanities. (1977)

The Frances C. Ferris Scholarship Fund was established by a bequest from the estate of Frances C. Ferris. The income from this fund is to be used to assist Friends who would otherwise be unable to attend Bryn Mawr College. (1977)

The Anne Long Flanagan Scholarship was established by a gift from Anne Long Flanagan of the Class of 1906 on the occasion of the 55th reunion of the Class. The income is to be used to provide scholarships for Protestant students. (1961)

The Reginald S. and Julia W. Fleet Foundation Scholarship Fund was established by gifts from the Reginald S. and Julia W. Fleet Foundation. (1974)

The Cora B. Fohs and F. Julius Fohs Perpetual Scholarship Fund was established by a gift from the Fohs Foundation. (1965)

The Folly Ranch Fund was established by an anonymous gift, the income from which is to be used for graduate and undergraduate scholarships in honor of Eleanor Donnelley Erdman, Class of 1921; Clarissa Donnelley Haffner, Class of 1921; Elizabeth P. Taylor, Class of 1921; and Jean T. Palmer, Class of 1924. (1974)

The William Franklin Scholarship Fund was established by a bequest from Susan B. Franklin of the Class of 1889. The income from this fund is to be used for scholarships for deserving girls, preference being given whenever possible to girls from the Rogers High School, Newport, Rhode Island. (1957)

The Edgar M. Funkhouser Memorial Scholarship Fund was established from his estate by Anne Funkhouser Francis of the Class of 1933. Awards may vary in amount up to full tuition and be tenable for four years, preference being given first to residents of southwest Virginia; thereafter to students from District IV eligible for aid in any undergraduate year. (1964)

The Helen Hartman Gemmill Scholarship for students majoring in English has been funded by the Warwick Foundation since 1967 and currently is in

the amount of \$2,000 per year. In addition, from the 40th reunion gift from Helen Hartman Gemmill of the Class of 1938, the amount of \$1,600 is awarded annually. (1967)

The Edith Rockwell Hall Scholarship Fund was established by a bequest from the estate of Florence R. Hall in memory of her sister Edith Rockwell Hall of the Class of 1892. (1977)

The Anna Hallowell Memorial Scholarship was founded in memory of Anna Hallowell by her family. The income is awarded annually to the junior in need of aid who has the highest academic record. (1912)

The Alice Ferree Hayt Memorial Prize was established by a bequest from the estate of Effie Todd Hayt in memory of her daughter Alice Ferree Hayt. The income of the fund is to be awarded annually to one or more students of the College in need of financial assistance for their personal use. (1977)

The Katharine Hepburn Scholarship, value \$1,000, first given for the year 1969-70, is awarded annually in honor Katharine Hepburn to a student interested in the study of drama and motion picture and in the cultivation of English diction and literary appreciation. (1952)

The Katharine Houghton Hepburn Memorial Scholarship was given in memory of Katharine Houghton Hepburn of the Class of 1900. The income on this fund is awarded for the junior or senior year to a student or students who have demonstrated both ability in her or their chosen field and independence of mind and spirit. (1957)

The George Bates Hopkins Memorial Scholarships were founded by a gift from Mrs. Elizabeth Hopkins Johnson in memory of her father. Preference is given to students of Music and, in default of these, to students majoring in History and thereafter to students in other departments. (1921)

The Maria Hopper Scholarships, two in number, were founded by bequest under the will of Maria Hopper of Philadelphia and are awarded annually. The income from this fund is used for aid to sophomores. (1901)

The Leila Houghteling Memorial Scholarship Fund was founded in memory of Leila Houghteling of the Class of 1911 by members of her family and a group of her contemporaries. It is awarded every three years on the nomination of the Alumnae Scholarship and Loan Fund Committee to a member of the freshman class and is held during the remaining three years of her college course. (1929)

The Shippen Huidekoper Scholarship Fund was established by an anonymous gift. The income is awarded annually on the nomination of the President. (1936)

The Evelyn Hunt Scholarships, two in number, were founded in memory of Evelyn Hunt by a bequest under the will of Evelyn Ramsey Hunt of the Class of 1898. (1931)

The Lillia Babbitt Hyde Scholarship Fund was established by gifts from the Lillia Babbitt Hyde Foundation to establish the Lillia Babbitt Hyde Scholar-

ship for award in so far as possible to students whose major subject will lead to a medical education or a scientific education in chemistry. (1963)

The Jane Lilley Ireson Scholarship was established by a bequest under the will of Jennie E. Ireson, her daughter. The income on units of this fund is awarded. (1959)

The Alice Day Jackson Scholarship Fund was given by the late Percy Jackson in memory of his wife, Alice Day Jackson. The income from this fund is awarded annually to an entering student. (1930)

The Elizabeth Bethune Higginson Jackson Scholarship Fund was established by gifts in memory of Elizabeth Bethune Higginson Jackson of the Class of 1897 by members of her family and friends. The income from the fund is to be used for scholarships for undergraduate students as determined by the College Scholarship Committee. (1974)

The Sue Mead Kaiser Scholarship Fund was established by the alumnae of the Bryn Mawr Club of Northern California and other individuals in memory of Sue Mead Kaiser of the Class of 1931. (1974)

The Kathryn M. Kalbfleisch and George C. Kalbfleisch Scholarship Fund was established under the will of Kathryn M. Kalbfleisch of the Class of 1924. (1972)

The Alice Lovell Kellogg Fund was founded by a bequest by Alice Lovell Kellogg of the Class of 1903. (1967)

The Minnie Murdoch Kendrick Memorial Scholarship, tenable for four years, was founded by bequest of George W. Kendrick, Jr., in memory of his wife. It is awarded every four years to a candidate nominated by the Alumnae Association of the Philadelphia High School for Girls. (1916)

The Misses Kirk Scholarship Fund was founded in honor of the Misses Kirk by the Alumnae Association of the Kirk School in Bryn Mawr. (1929)

The Clara Bertram Little Memorial Scholarship was founded by Eleanor Little Aldrich, in memory of her mother. The income is awarded to an entering student from New England on the basis of merit and financial need. (1947)

The Mary Anna Longstreth Memorial Scholarship was given in memory of Mary Anna Longstreth by alumnae and children of alumnae of the Mary Anna Longstreth School and by a few of her friends. (1913)

The Lorenz-Showers Scholarship Fund was established by Justina Lorenz Showers of the Class of 1907, in honor of her parents, Edmund S. Lorenz and Florence K. Lorenz, and of her husband, John Balmer Showers. (1943)

The Alice Low Lowry Memorial Scholarship Fund was established by gifts in memory of Alice Low Lowry, Class of 1938, by members of her family and friends. The income is to be used for scholarships for undergraduate and graduate students. (1968)

The Katharine E. McBride Undergraduate Scholarship Fund was established by a gift made by Gwen Davis Mitchell, Class of 1954. (1969) It has been added to by others in honor of Miss McBride.

The Gertrude Howard McCormick Scholarship Fund was established by gift of the late Gertrude Howard McCormick. The scholarship, value \$1,000, is awarded to a student of excellent standing, preferably for her freshman year. If she maintains excellent work in college, she may continue to receive scholarship aid through her sophomore, junior and senior years. (1950)

The Mary McLean and Ellen A. Murter Memorial Fund was founded in memory of her two aunts by bequest of Mary E. Stevens of Germantown, Philadelphia. The income is used for an annual scholarship. (1933)

The Midwest Scholarship Endowment Fund was established by alumnae from District VII in order "to enlarge the benefits which can be provided for able students from the midwest." The income from this fund is to be awarded in the same manner as regional scholarships. (1974)

The Beatrice Miller Memorial Scholarship Fund was established by a bequest of Beatrice Miller Ullrich of the Class of 1913. (1969)

The Constance Lewis and Martha Rockwell Moorhouse 1904 Memorial Scholarship Fund was established by the Class of 1904 in memory of their classmates Constance Lewis and Martha Rockwell Moorhouse. (1920)

The Evelyn Flower Morris Cope and Jacqueline Pascal Morris Evans Scholarship Fund was established by members of their families in memory of Evelyn Flower Morris of the Class of 1903 and Jacqueline Pascal Morris of the Class of 1908. (1959)

The Jean Brunn Mungall 1944 Memorial Scholarship Fund was established by the Class of 1944 in memory of Jean Mungall and other deceased classmates. (1955)

The Frank L. Neall and Mina W. Neall Scholarship Fund was established by a legacy from the estate of Adelaide W. Neall of the Class of 1906 in memory of her parents. (1957)

The New Hampshire Scholarship Fund was established by the Spaulding-Potter Charitable Trust. A matching fund was raised by contributions from New Hampshire alumnae. Income from the two funds is awarded each year to an undergraduate from New Hampshire on the recommendation of the New England Regional Scholarship Committee. (1965)

The Alice F. Newkirk Scholarship Fund was founded by bequest of Alice F. Newkirk. (1965)

The Mary Frances Nunns Scholarship Fund was established by a bequest under the will of Mary Frances Nunns. (1960)

The Pacific Northwest Student Aid Endowment Fund was established by a gift from Natalie Bell Brown of the Class of 1943. Preference is given to students from the Pacific Northwest. (1977)

The Florence Morse Palmer Scholarship was founded in memory of Florence Morse Palmer by her daughter, Jean T. Palmer, of the Class of 1924. (1954)

The Margaret Tyler Paul Scholarship was established by a 40th reunion gift from the Class of 1922. (1963)

The Fanny R. S. Peabody Scholarship Fund was established by bequest of Fanny R. S. Peabody. The income from the Peabody Fund is awarded to students from the western states. (1943)

The Delia Avery Perkins Scholarship was established by bequest from Delia Avery Perkins of the Class of 1900. Mrs. Perkins was Chairman of the New Jersey Scholarship Committee for a number of years. The income on this fund is to be awarded to freshman students from Northern New Jersey. (1965)

The Mary DeWitt Pettit Scholarship Fund was established by a gift from the Class of 1928 to honor their classmate, and is used for student scholarship aid. (1978)

The Ethel C. Pfaff Scholarship Fund was established by a bequest from Ethel C. Pfaff of the Class of 1904. The income from this fund is to be awarded to entering freshmen. (1967)

The Louise Hyman Pollak Scholarship was founded by the Board of Trustees from a bequest by Louise Hyman Pollak of the Class of 1908. The income from this fund, which has been supplemented by gifts from the late Julian A. Pollak and his son, David Pollak, is awarded annually to an entering student from one of the central states, east of the Mississippi River. Preference is given to residents of Cincinnati. (1932)

The Anna M. Powers Memorial Scholarship was founded in memory of Anna M. Powers by a gift from her daughter, Mrs. J. Campbell Harris. It is awarded annually to a senior. (1902)

The Anna and Ethel Powers Memorial Scholarship was established by a gift in memory of Anna Powers of the Class of 1890 by her sister, Mrs. Charles Merrill Hough. The fund has been re-established in memory of both Anna Powers and her sister, Mrs. Hough (Ethel Powers), by Nancy Hough Smith of the Class of 1925. (1919)

The Thomas H. Powers Memorial Scholarship was founded in memory of Thomas H. Powers by bequest under the will of his daughter, Mrs. J. Campbell Harris. It is awarded annually to a senior. (1902)

The Princeton Book Sale Scholarship was established by the alumnae of the Bryn Mawr Club of Princeton. The income from the fund is to be used for scholarships for students chosen by the College Scholarship Committee. (1974)

The James E. Rhoads Memorial Scholarships were founded in memory of the first President of the College, Dr. James E. Rhoads, by the Alumnae Association of Bryn Mawr College. The income is awarded annually to two students. The James E. Rhoads Memorial Junior Scholarship is awarded

to a student who has attended Bryn Mawr for at least three semesters, has done excellent work and expresses her intention of fulfilling the requirements for the degree of Bachelor of Arts at the College. The James E. Rhoads Memorial Sophomore Scholarship is awarded to a student who has attended Bryn Mawr College for at least one semester and who also meets the above conditions. (1898)

The Amelia Richards Scholarship was founded in memory of Amelia Richards of the Class of 1918 by bequest of her mother, Mrs. Frank P. Wilson. It is awarded annually by the Trustees on the nomination of the President. (1921)

The Ida E. Richardson, Alice H. Richardson and Edward P. Langley Scholarship Fund was established by bequest under the will of Edward P. Langley. (1970)

The Maximilian and Reba E. Richter Scholarship Fund was established by bequest of Max Richter, father of Helen Richter Elser of the Class of 1913. The income from this fund is to be used to provide assistance for one or more students in the obtaining of either an academic or professional degree. The fund shall be administered on a non-sectarian basis to such applicants as are deemed worthy by habits of character and scholarship. No promises of repayment shall be exacted but it is hoped that students so benefited will desire when possible to contribute to the fund in order that similar aid may be extended to others. Such students shall be selected from among the graduates of public high schools or public colleges in the City of New York. (1961)

The Nancy Perry Robinson Memorial Scholarship Fund was established by a gift from Mrs. Huston B. Almond, of Philadelphia, in memory of her godchild, Nancy Perry Robinson, of the Class of 1945. The income of the fund is to be awarded annually to an undergraduate student, with preference being given to a student majoring in French. (1973)

The Marie L. Rose Huguenot Scholarship. \$1,000 a year is available to students of Huguenot ancestry nominated by the College for award by The Huguenot Society of America. Special application forms are available from the College's Office of Financial Aid.

The Serena Hand Savage Memorial Scholarship was established in memory of Serena Hand Savage of the Class of 1922 by her friends. It is awarded to a member of the junior class who shows great distinction of scholarship and character. This scholarship may be renewed in the senior year. (1951)

The J. Henry Scattergood Scholarship Fund was established by a gift from the Friends' Freedmen's Association to be used for undergraduate scholarships for black students. (1975)

The Constance Schaar Scholarship Fund was established by her parents and friends in memory of Constance Schaar of the Class of 1963. The Class of 1963 added their first reunion gift to this fund. (1964)

The Scholarship Endowment Fund was established by a gift from Constance E. Flint. (1970)

The Zella Boynton Selden Scholarship Fund was established in memory of Zella B. Selden, Class of 1920, in recognition of her many years of devoted work with the New York and Southern Connecticut Regional Scholarship Committee. (1976)

The Judith Harris Selig Scholarship Fund was established in memory of Judith Harris Selig of the Class of 1957 by members of her family, classmates and friends. In 1970 the fund was increased by a further gift from her parents, Dr. and Mrs. Herman S. Harris. (1968)

The Mary Williams Sherman Memorial Scholarship Fund was established by bequest of Bertha Williams of Princeton, New Jersey. (1942)

The Frances Marion Simpson Scholarships, carrying up to full tuition and tenable for four years, were founded in memory of Frances Simpson Pfahler of the Class of 1906 by Justice Alexander Simpson, Jr. One scholarship is awarded each year to a member of the entering freshman class. In awarding these scholarships preference is given first to residents of Philadelphia and Montgomery Counties who have been prepared in the public schools of these counties; thereafter, under the same conditions, to residents of other counties of Pennsylvania, and, in special cases, to candidates from other localities. Holders of these scholarships are expected to repay the sums advanced to them. (1912)

The Lillian Seidler Slaff Scholarship Fund was established in memory of Lillian Seidler Slaff, Class of 1940, to provide an award to a member of the junior class for outstanding work in the social sciences. (1980)

The Gertrude Slaughter Scholarship Fund was established by bequest of Gertrude Taylor Slaughter of the Class of 1893. The income on this fund is to be awarded preferably to students of Greek or Latin. (1964)

The Anna Margaret Sloan and Mary Sloan Scholarships were founded by bequest of Mary Sloan of Pittsburgh. The income is awarded annually to students majoring in Philosophy or Psychology. (1942)

The Cordelia Clark Sowden Scholarship Fund was established by a bequest from Helen C. Sowden. (1957)

The Amy Sussman Steinhart Scholarship, carrying full tuition, was founded in memory of Amy Sussman Steinhart of the Class of 1902 by her family and friends. The income is awarded annually to an entering student from one of the states on the west coast. (1932)

The Mary E. Stevens Scholarship Fund was given in memory of Mary E. Stevens by former pupils of the Stevens School in Germantown. The scholarship is awarded annually to a junior. (1897)

The Anna Lord Strauss Scholarship and Fellowship Fund was established by a gift from Anna Lord Strauss to support graduate and undergraduate

students who are interested in fields leading to public service or which involve education in the process of government. (1976)

The Summerfield Foundation Scholarship was established by a gift from the Solon E. Summerfield Foundation. The income from this fund is to be used to assist able students who need financial help to continue their studies. (1958)

The Mary Hamilton Swindler Scholarship for the study of Archaeology was established in honor of Mary Hamilton Swindler, Professor of Classical Archaeology from 1931 to 1949, by a group of friends and former students. (1950)

The Elizabeth P. Taylor Scholarship Fund was established by a bequest from Elizabeth P. Taylor of the Class of 1921. (1961)

The Kate Wendell Townsend Memorial Scholarship was established by a bequest from Katharine W. Sisson of the Class of 1920 in memory of her mother. The income is to be awarded annually to an undergraduate, preferably from New England, who has made a definite contribution to the life of the College in some way besides scholastic attainment. (1978)

The Ethel Vick Wallace Townsend Memorial Fund was established by Elbert S. Townsend in memory of his wife, Ethel Vick Wallace Townsend, of the Class of 1908. The income on this fund, held by the Buffalo Foundation, is to be used for undergraduate scholarships. (1967)

The Jacob Fussell Byrnes and Mary Byrnes Fund was established in memory of her mother and father by a bequest under the will of Esther Fussell Byrnes. (1948)

The Anne Hawks Vaux Scholarship Fund was founded in her memory by her husband, George Vaux, and added to by some of her friends. The income is to be awarded annually to a student in need of financial aid. (1979)

The Elizabeth Gray Vining Exchange Scholarship was established by gifts from over 100 alumnae and friends of the College in Japan, in honor of Elizabeth Vining, A.B. 1923, former tutor to the Crown Prince. The purpose of this fund is to support Bryn Mawr alumnae, graduate students, or faculty members who desire to do academic research in Japan or to have direct contact with Japanese culture. (1973)

The Mildred Clarke Pressinger von Kienbusch Scholarship Fund was established by C. Otto von Kienbusch in memory of his wife, Mildred Clarke Pressinger von Kienbusch, of the Class of 1909. (1968)

Mildred and Carl Otto von Kienbusch Scholarship Fund was established by bequest of C. Otto von Kienbusch. (1976)

The Mary E. G. Waddell Scholarship Fund was established by a bequest from the estate of Mary E. G. Waddell. The income from this fund is to be used for scholarships for undergraduates and graduate students interested

in the study of Mathematics who are daughters of American citizens of Canadian descent. (1971)

The Julia Ward Scholarship Fund was established by a gift for a scholarship in memory of Julia Ward of the Class of 1923 by one of her friends and by additional gifts from others. The income is to be used for undergraduate scholarships. (1962)

The Eliza Jane Watson Scholarship Fund was established by gifts from the John Jay and Eliza Jane Watson Foundation. The income from this fund is to be used to assist one or more students to meet the cost of tuition. (1964)

The Elizabeth Wilson White Memorial Scholarship was founded in memory of Elizabeth Wilson White by a gift by Thomas Raeburn White. It is awarded annually by the President. (1923)

The Thomas Raeburn White Scholarships were established by Amos and Dorothy Peaslee in honor of Thomas Raeburn White, Trustee of the College from 1907 until his death in 1959, Counsel to the College throughout these years and President of the Trustees from 1956 to 1959. The income from the fund is to be used for prizes to undergraduate students who plan to study foreign languages abroad during the summer under the auspices of an approved program. (1964)

The Mary Peabody Williamson Scholarship was founded by bequest of Mary Peabody Williamson of the Class of 1903. (1939)

The Marion H. Curtin Winsor Memorial Scholarship was established by a bequest of Mary Winsor in memory of her mother. The income on this fund is to be awarded to a resident black student. (1960)

The Mary Winsor Scholarship in Archaeology was established by a bequest under the will of Mary Winsor. (1960)

The Ellen Winsor and Rebecca Winsor Evans Memorial Scholarship Fund was established by a bequest in the will of Rebecca Winsor Evans. The scholarship is to be awarded to a resident black student. (1962)

The Rebecca Winsor Evans and Ellen Winsor Memorial Scholarship Fund was established by a bequest in the will of Ellen Winsor. The scholarship is to be awarded to a resident black student. (1962)

The Gertrude Miller Wright Scholarships were established under the will of Dorothy M. Wright of the Class of 1931, for needy students of Bryn Mawr College. (1973)

The Lila M. Wright Memorial Scholarship was founded in her memory by gifts from the alumnae of Miss Wright's School of Bryn Mawr. (1934)

The Georgie W. Yeatman Scholarship was founded by bequest under the will of Georgie W. Yeatman of Philadelphia. (1941)

SCHOLARSHIPS FOR FOREIGN STUDENTS

The Bryn Mawr-Africa Exchange Fund is an anonymous donation given to support scholarship aid to African students in the Undergraduate College or the Graduate Schools at Bryn Mawr, for study and research in Africa by Bryn Mawr faculty and students, for lectures or lectureships at Bryn Mawr by visiting African scholars, statesmen and artists, and for library and teaching materials for African studies at Bryn Mawr.

The Bryn Mawr Canadian Scholarship is raised and awarded each year by Bryn Mawr alumnae living in Canada. The scholarship, varying in amount, is awarded to a Canadian student entering either the undergraduate or graduate school. (1965)

The Chinese Scholarship comes in part from the annual income of a fund established by a group of alumnae and friends of the College in order to meet all or part of the expenses of a Chinese student during her four undergraduate years at Bryn Mawr College. (1917)

The Marguerite N. Farley Scholarships for foreign students were established by bequest of Marguerite N. Farley. The income from the fund is used for scholarships for foreign graduate and undergraduate students covering part or all of their expenses for tuition and residence. (1956)

The Susan Grimes Walker Fitzgerald Fund was established by a gift from Susan Fitzgerald of the Class of 1929 in honor of her mother Susan Grimes Walker Fitzgerald of the Class of 1893. It is to be used for foreign graduate and undergraduate students studying at Bryn Mawr or for Bryn Mawr students doing research abroad in the summer or during the academic year. (1976)

Mrs. Wistar Morris Japanese Scholarship was established when the Japanese Scholarship Committee of Philadelphia, founded in 1893, turned over its assets to Bryn Mawr College. The income from this fund is to be used for scholarships for Japanese women. (1978)

The Margaret Y. Kent Scholarship Fund, Class of 1908 was established by bequest of Margaret Y. Kent of the Class of 1908. It is to be used to provide scholarship assistance to foreign students. (1967)

The Lora Tong Lee Memorial Scholarship is awarded annually by the Lee Foundation, Singapore, to a Chinese student for tuition, room and board, in memory of Lora Tong Lee, M.A. 1944. (1975)

The Middle East Scholarship Fund was established by a gift from Elizabeth Cope Harrison of the Class of 1958. The purpose of the fund is to enable the College "to make scholarship awards to able students from a number of Middle Eastern Countries." (1975)

The Special Trustees' Scholarship is awarded every four years to a foreign student. It carries free tuition and is tenable for four years. The scholarship for students from foreign countries was first offered by the Trustees in 1940.

The Harris and Clare Wofford International Fund is an endowed fund, the income only to be used to support the College's international activities with emphasis on providing scholarships for international students at Bryn Mawr.

PRIZES AND ACADEMIC AWARDS

The following awards, fellowships, scholarships and prizes are in the award of the faculty and are given solely on the basis of academic distinction and achievement.

The Bryn Mawr European Fellowship has been awarded each year since the first class was graduated in 1889. It is given for merit to a member of the graduating class, to be applied toward the expenses of one year's study at some foreign university.

The Maria L. Eastman Brooke Hall Memorial Scholarship was founded in memory of Maria L. Eastman, Principal of Brooke Hall School for Girls, Media, Pennsylvania, by gifts from the alumnae and former pupils of the school. It is awarded annually to the member of the junior class with the highest general average and is held during the senior year. Transfer students who enter Bryn Mawr as members of the junior class are not eligible for this award. (1901)

The Elizabeth Duane Gillespie Fund for Scholarships in American History was founded by a gift from the National Society of Colonial Dames of America in the Commonwealth of Pennsylvania in memory of Elizabeth Duane Gillespie. Two prizes are awarded annually on nomination by the Department of History, one to a member of the sophomore or junior class for work of distinction in American History, a second to a student doing advanced work in American History for an essay written in connection with that work. The income from this fund has been supplemented since 1955 by annual gifts from the Society. (1903)

The Elizabeth G. Shippen Scholarships were founded by two bequests under the will of Elizabeth S. Shippen of Philadelphia. Three prizes are awarded annually, one to the member of the senior class who receives The Bryn Mawr European Fellowship and two to members of the junior class, as follows: 1. *The Shippen Scholarship in Science* to a student whose major subject is Biology, Chemistry, Geology or Physics; 2. *The Shippen Scholarship in Foreign Languages* to a student whose major subject is French, German, Greek, Italian, Latin, Russian or Spanish. To be eligible for either of these two scholarships a student must have completed at least one semester of the second-year course in her major subject. Neither may be held by the winner of the Charles S. Hinchman Memorial Scholarship. Work in elementary courses will not be considered in awarding the scholarship in foreign languages; 3. *The Shippen Scholarship for Foreign Study*. See The Bryn Mawr European Fellowship above. (1915)

The Charles S. Hinchman Memorial Scholarship was founded in the memory of the late Charles S. Hinchman of Philadelphia by a gift made by his family. It is awarded annually to a member of the junior class for work of special excellence in her major subjects and is held during the senior year. (1917)

The Sheelah Kilroy Memorial Scholarships in English were founded in memory of their daughter Sheelah by Dr. and Mrs. Phillip Kilroy. These prizes are awarded annually on the recommendation of the Department of English as follows: to a student for excellence of work in second-year or advanced courses in English, and to the student in the first-year course in English Composition who writes the best essay during the year. (1919)

The Jeanne Quistgaard Memorial Prize was given by the Class of 1938 in memory of their classmate Jeanne Quistgaard. The income from this fund may be awarded every two years to a student in Economics. (1938)

The Esther Walker Award was founded by a bequest from William John Walker in memory of his sister, Esther Walker, of the Class of 1910. It may be given annually to a member of the senior class who in the judgment of the faculty shall have displayed the greatest proficiency in the study of living conditions of northern blacks. (1940)

The M. Carey Thomas Essay Prize is awarded annually to a member of the senior class for distinction in writing. The award is made by the Department of English for either creative or critical writing. It was established in memory of Miss Thomas by her niece, Millicent Carey McIntosh, of the Class of 1920. (1943)

The Katherine Fullerton Gerould Memorial Prize was founded in 1946 by a gift from a group of alumnae, many of whom were students of Mrs. Gerould when she taught at Bryn Mawr from 1901 to 1910. The fund was increased by a bequest of one of her former students. It is awarded by a special committee to a student who shows evidence of creative ability in the fields of informal essay, short story and longer narrative or verse. (1946)

The Hester Ann Corner Prize for distinction in literature was established in memory of Hester Ann Corner of the Class of 1942 by gifts from her family, classmates and friends. The award is made annually to a junior or senior on the recommendation of a committee composed of the chairmen of the departments of English and of classical and modern foreign languages. (1950)

The Academy of American Poets Prize of \$100 has been recently awarded each year to the student who submits to the Department of English the best poem or group of poems. The award, given by the Academy of American Poets, was first made in 1957.

The Helen Taft Manning Essay Prize in History was established in honor of Helen Taft Manning, in the year of her retirement, by her class (1915). The income is to be awarded as the Department of History may determine. (1957)

The Bain-Swiggett Poetry Prize was established by a gift of Mr. and Mrs. Glen Levin Swiggett. This prize is to be awarded by a committee of the faculty on the basis of the work submitted. (1958)

The Charlotte Angas Scott Prize in Mathematics is awarded annually to an undergraduate on the recommendation of the Department of Mathematics. It was established by an anonymous gift in memory of Charlotte Angas Scott, Professor of Mathematics and a member of the faculty of Bryn Mawr College from 1885 to 1924. (1961)

The Anna Pell Wheeler Prize in Mathematics is awarded annually to an undergraduate on the recommendation of the Department of Mathematics. It was established by an anonymous gift in honor of Anna Pell Wheeler, Professor Emeritus of Mathematics and a member of the faculty of Bryn Mawr College from 1918 until her death in 1966. (1961)

The Emma Osborn Thompson Prize in Geology was founded by bequest of Emma Osborn Thompson of the Class of 1904. From the income on the bequest a prize is to be awarded from time to time to a student in Geology. (1963)

The Gertrude Slaughter Fellowship was established by a bequest of Gertrude Taylor Slaughter of the Class of 1893. The Fellowship is to be awarded to a member of the graduating class for excellence in scholarship to be used for a year's study in the United States or abroad. (1964)

The Commonwealth Africa Scholarship was established by a grant from the Thorncroft Fund Inc. at the request of Helen and Geoffrey de Freitas. The income from this fund is used to send, for at least six months, a graduate to a university or college in Commonwealth Africa or a former British colony in Africa, to teach or to study, with a view to contributing to mutual understanding and the furtherance of scholarship. (1965)

The Alexandra Peschka Prize was established in memory of Alexandra Peschka of the Class of 1964 by gifts from her family and friends. The prize of \$100 is awarded annually to a member of the freshman or sophomore class for the best piece of imaginative writing in prose. The award is made by a committee of the Department of English, who consults the terms stated in the deed of gift. (1968)

The Katherine Stains Prize Fund in Classical Literature was established by Katherine G. Stains in memory of her parents Arthur and Katheryn Stains, and in honor of two excellent twentieth-century scholars of classical literature, Richmond Lattimore and Moses Hadas. The income on the fund is to be awarded annually as a prize to an undergraduate student for excellence in Greek literature, either in the original or in translation. (1969)

The Horace Alwyne Prize was established by the Friends of Music of Bryn Mawr College in honor of Horace Alwyne, Professor Emeritus of Music. The award is presented annually to the student who has contributed the most to the musical life of the college. (1970)

The Hope Wearn Troxell Memorial Prize is awarded annually by the alumnae of Southern California to a student from Alumnae District IX, with first consideration to a student from Southern California. The prize is awarded in recognition of the student's responsible contribution to the life of the College community. (1973)

The Berle Memorial Prize Fund in German Literature was established by Lillian Berle Dare in memory of her parents, Adam and Katharina Berle. The income on the fund is awarded annually to an undergraduate for excellence in German literature. Preference is given to a senior who is majoring in German and who does not come from a German background. (1975)

The Lillie Seip Snyder Memorial Prize Fund was established by Frances L. Snyder and Nellie Fink, daughters of Lillie Seip Snyder. An annual prize is awarded from the income of this fund to a graduate or undergraduate in musicology. (1977)

The Sarah Stifler Jesup Fund was established in memory of Sarah Stifler Jesup of the Class of 1956 by gifts from New York alumnae, as well as family and friends. The income is to be awarded annually to one or more undergraduate students to further a special interest, project or career goal during term time or vacation. (1978)

The Seymour Adelman Book Collector's Award is given each year to a student for a prize-winning collection on any subject, single author, or group of authors, and may include manuscripts and graphics. (1980)

The General Electric Foundation Katherine Blodgett Fellowship was established in memory of Katherine Blodgett, one of the first women industrial scientists, who was associated with General Electric for many years, and who was a member of the Bryn Mawr Class of 1917. It provides full support to a graduating senior for the first year of graduate work directed towards a Ph.D. in physics, chemistry, engineering or computer science at another institution in the United States. (1980)

SCHOLARSHIPS FOR MEDICAL STUDY

The following scholarships may be awarded to seniors intending to study medicine, after their acceptance by a medical school, or to graduates of Bryn Mawr intending or continuing to pursue a medical education. Applications for the scholarships should be made to the Premedical Adviser before March 15 preceding the academic year in which the scholarship is to be held. Applications for renewal of scholarships must be accompanied by letters of recommendation from instructors in the medical school.

The Linda B. Lange Fund was founded by bequest of \$30,000 under the will of Linda B. Lange of the Class of 1903. The income from this fund provides the *Anna Howard Shaw Scholarship in Medicine and Public Health*, awarded on recommendation of the President and faculty to a member of the graduating class or a graduate of the College for the pursuit, during an

uninterrupted succession of years, of studies leading to the degrees of M.D. and Doctor of Public Health. The award may be continued until the degrees are obtained. (1948)

The Hannah E. Longshore Memorial Medical Scholarship was founded by Mrs. Rudolf Blankenburg in memory of her mother by a gift of \$10,000. The scholarship is awarded by a committee of the faculty to a student who has been accepted by a medical school. It may be renewed for each year of medical study. (1921)

The Jane V. Myers Medical Scholarship Fund of \$10,000 was established by Mrs. Rudolf Blankenburg in memory of her aunt. The scholarship is awarded by a committee of the faculty to a student who has been accepted by a medical school. It may be renewed for each year of medical study. (1921)

The Harriet Judd Sartain Memorial Scholarship Fund was founded by bequest of \$21,033 under the will of Paul J. Sartain. The income from this fund is to establish a scholarship which is awarded to a member of the graduating class who in the judgment of the faculty needs and is deserving of assistance for the study of medicine. This scholarship may be continued for the duration of her medical course. (1948)

Loan Funds

Bryn Mawr College administers two kinds of loan programs. The first consists of four funds established through the generosity of alumnae and friends of the College. Applications for loans must be accompanied by the Financial Aid Form prepared by the College Scholarship Service of the College Entrance Examination Board.

The Students' Loan Fund of the Alumnae Association of Bryn Mawr College was founded by the Class of 1890 for the use of students who need to borrow money in order to continue their college work. The fund is managed by the Alumnae Scholarships and Loan Fund Committee.

Loans may be used for any purpose approved by the committee, but not more than \$500 may be borrowed by a student in any one year. The total for four years must not exceed \$1,500. Students who wish loans may obtain from the Financial Aid Office or the Alumnae Office the necessary blanks, which must be accompanied by a letter of recommendation from the Financial Aid Officer.

While the student is in college no interest is charged, and she may reduce the principal of the loan if she so desires. After the student leaves college, the interest rate is modest. The entire principal must be repaid within five years of the time the student leaves college at the rate of twenty

percent each year. The principal payments are deferred if the student enrolls in graduate or professional school, although interest payments must be made.

Contributions to the Loan Fund may be sent to the Chairman of Scholarships and Loan Fund, Bryn Mawr College Alumnae Association, Bryn Mawr, Pennsylvania 19010.

The Mary Hill Swope Loan Fund was established in 1945 by a gift of the late Mrs. Gerard Swope (Mary Hill, A.B. 1896) to assist in the education of young women irrespective of race, color or creed attending Bryn Mawr College, the income of the fund to be lent to students in the following manner:

a. The following order of preference shall be followed in awarding such loans: to students coming from New Jersey, to students coming from Missouri, to students coming from any other location who have had not less than one year of residence at the College.

b. The loans in the above order of preference, and in the following manner, shall be awarded by the President of Bryn Mawr College or by a committee appointed by her from time to time.

c. Applicants for loans shall be considered not only from the standpoint of academic attainment and financial need, but also from the standpoint of character and personal qualifications for deriving the greatest good from a continuation of their studies.

d. These loans shall be used primarily to enable the exceptional student to continue her studies, which otherwise would be prevented through lack of means.

e. Except under extraordinary circumstances, the maximum amount which may be borrowed annually is \$500. No interest is charged while the student is in college. The interest rate is three percent, to be paid after the student leaves college. The principal is to be repaid within five years of the time the student graduates or leaves Bryn Mawr at the rate of twenty percent each year.

The Gerard and Mary Hill Swope Loan Fund was established in 1962 under the following conditions:

a. Non-scholarship students and graduate students are also eligible to apply for loans from this fund.

b. The interest rate is three percent and interest begins to accrue as of the date of graduation. The entire principal must be repaid within five years of the time the student leaves college at the rate of twenty percent each year.

c. Loans are awarded by the Scholarship Committees of the Undergraduate College, the Graduate School of Arts and Sciences and the Graduate School of Social Work and Social Research.

The Clareth Fund was established in 1971 by a bequest to the College from the estate of Ethel S. Weil. The income only is to be used for students

"specializing in economics or business." There is no interest due but the student must begin to repay the loan within six years after graduation.

The Alfred and Mary Douty Loan Fund, an expendable loan fund for student loans, was established in 1976 by an initial donation of \$5,000 from the Trustees of the Alfred and Mary Douty Foundation. The fund will be augmented by a pledge from the Foundation of \$22,500 to be paid through the years 1977 to 1983. Loans from this fund may be made to graduate or undergraduate students. Repayment of the principal of the loan begins nine months after graduation, withdrawal, or cessation of at least half time study. The entire principal must be repaid within five years from the date the first payment becomes due at the rate of twenty percent (20%) each year plus interest of 3% per annum on the unpaid balance.

The second kind of loan program, administered by the College, is based on government funds made available through *The National Direct Student Loan Program*. Applications for loans must be accompanied by the Financial Aid Form prepared by the College Entrance Examination Board. The three percent interest rate and repayment of the loan begin one year after the student has completed her education.

Students who, upon graduation, teach on a full-time basis in public or private non-profit elementary and secondary schools in an economically depressed area as defined by the H.E.W. National Register or who work with handicapped children are allowed cancellation of their debts at the rate of 15% per year for the first and second years, 20% per year for the third and fourth years and 30% for the fifth year or total cancellation over five years.

International Initiatives Loan Fund makes loan funds available to currently enrolled undergraduate and graduate students through a special donation for the purpose of supporting independent study or research projects abroad. It is not normally available to students in a regular Junior Year Abroad program. Full information and applications are available in the Office of the Undergraduate Dean.

The Federally Insured or State Guaranteed Student Loan Programs are government subsidized programs which were instituted to enable students to meet educational expenses. Application is made through the students' home banks. An undergraduate student may borrow up to \$2,500 per year depending on the state regulations in effect in her state. Repayment begins nine months after the student is no longer enrolled, at least half-time, at an accredited institution. The interest is seven percent. The government will pay this interest until the repayment period begins.

Alumnae Representatives

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NOTES

Appendix A

Fees 1981-82

Tuition

The tuition fee in 1981-82 for all undergraduate students, resident and nonresident, is \$6,900 a year.

Summary of Fees and Expenses for 1981-82

Tuition	\$6900
Residence	3050

Minor Fees

Laboratory fee per semester:

One course of 2 hours or less a week	\$15.00
One course of more than 2 hours a week	30.00
Two or more courses of more than 2 hours a week	60.00
Health Insurance (Students' Health Care Plan)	92.50
(For foreign students)	130.00
College Fee (Customs Week, Commencement, etc.)	40.00

The entire fee will be billed on July 15, 1981 and due on August 15, 1981. In the event of withdrawal from the College in Semester I, all fees for Semester II will be refunded, and the fees for Semester I will be refunded according to the following schedule:

July 15—August 28, 1981	100%
August 31—September 11	75%
September 14—October 9	50%
After October 9	no refund

In Semester II:

January 18—January 29, 1982	75%
February 1—February 19	50%
After February 19	no refund

Procedure for Securing Refunds

Written notice of intention to withdraw must be submitted to the Dean. All students receiving financial aid must consult with the Financial Aid Officer, including students who have received federally insured loans, e.g., loans guaranteed by state agencies (GSLP) and National Direct Student loans (NDSL) to meet educational expenses for the current

academic year. The amount of the refund is determined by the Comptroller's Office according to the schedule above and is based on the date of departure from campus.

Schedule of Payments

Tuition and residence fees will be billed in full and may be paid as follows:

For resident students

\$8465 due not later than August 15

\$1525 due not later than January 1

For non-resident students

\$6900 due not later than August 15

(\$50 a month late payment fee)

No student will be permitted to attend classes or enter residence until payment of the College charges, including a College Fee of \$40, has been made. No student will be registered at the beginning of a semester, or be graduated, or receive a transcript until all accounts are paid, including a single yearly activities fee of \$75 collected by Student Government officers. This fee covers class and hall dues, and support for student organizations such as *The News* and Arts Council. All resident students are required to participate in the College food plan.

An alternate payment plan is offered those who wish to pay tuition in two equal installments by August 15 and January 1. A service charge of \$100 will be added to the second semester bill.

Faced with the rising costs affecting all parts of higher education, the College has had to raise tuition each of the last several years, and further increases may be expected.

Monthly Payment Plan

For parents who wish to pay college fees on a monthly basis the College offers the one year insured tuition plan in cooperation with the Provident National Bank. The College also offers a prepayment plan with monthly payments at no interest and a long-term repayment plan enabling parents to pay four years of College costs over six to eight years with monthly installments of principal and interest. Both plans are offered in cooperation with the Richard C. Knight Insurance Agency.

Residence

The charge for residence is \$3050 a year and will be billed with tuition in full in July and be paid in two equal payments, that is, on August 15, 1981 and January 1, 1982. Refunds will be made according to the schedule above.

Students are permitted to reserve a room during the spring semester for the succeeding academic year, prior to payment of room and board fees, if they intend to be in residence during that year. Those students who have reserved a room, but decide later to withdraw from the College or take a leave of absence, will be charged a fee of \$100. This charge will be deducted from the student's general deposit.

General Deposit

All entering students are required to make a deposit of \$100. This deposit will remain with the College while the student is enrolled as an undergraduate. After one year of attendance, the deposit will be returned thirty days after graduation or withdrawal from College. However, any unpaid bills and any expenses incurred as a result of destruction or negligence on the part of the student will be applied against the deposit.

The average cost of educating each undergraduate is over \$12,000 a year. The difference over and above tuition must be met from private gifts and income from endowment. Contributions from parents able and willing to pay an additional sum are most welcome to help meet the expenses of instruction.

NOTES

NOTES

Directions to Bryn Mawr College

From the North and Northeast

The College is most easily reached using the Schuylkill Expressway (I-76). From the North and Northeast there are three approaches to I-76.

1. Walt Whitman Bridge, I-676 to I-76
2. Benjamin Franklin Bridge, I-76 (Vine Street) continuing west on I-76
3. Pennsylvania Turnpike to Exit 24 (Valley Forge Exit) continuing east on I-76

From these approaches you may use the following routes:

1. **CITY AVENUE** Take Exit 41 (City Avenue-U.S. 1 South) and proceed on City Avenue until City Avenue intersects route 30 (Lancaster Avenue). Turn right on Lancaster Avenue and drive approximately four miles to reach the center of Bryn Mawr. Turn right on Morris Avenue (Arco gas station) and follow the underpass. There is a College parking lot one and one-half blocks along Morris Avenue on the left.
2. **GULPH MILLS** Take Exit 27 (PA 320, Gulph Mills). Follow PA 320 south and turn left at the first traffic light onto Old Gulph Road. The College is three miles down the road on the right. A College Parking lot is located the third entrance on the right after Roberts Road.

From the West

Pennsylvania Turnpike to Exit 24 (Valley Forge Exit). Continue east on I-76 and take the Gulph Mills route described above.

From the South

Follow I-95 through Wilmington, Delaware, to Chester, Pennsylvania, then take the PA 352-Edgemont Avenue Exit. Immediately look for, and follow, signs for PA 320 North. Continue north on PA 320 for approximately 10.5 miles. Turn right on Bryn Mawr Avenue and follow until it crosses Lancaster Avenue and joins Morris Avenue. Turn left on Morris Avenue and follow the underpass. There is a College parking lot one and one-half blocks along Morris Avenue on the left.

The Admissions Office is located in the Ely House on North Merion Avenue.

BRYN MAWR

Undergraduate College

1980-82

Bryn Mawr College Calendar

BRYN MAWR

*The Graduate School
of Arts and Sciences*

1981–83

Bryn Mawr College Calendar
The Graduate School
of Arts and Sciences

Issue for the Session of 1981-82
July 1981, *Volume LXXIV Number 2*

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Graduate Work at Bryn Mawr

Graduate students at Bryn Mawr are members of a small scholarly community in which they work as apprentices and junior scholars in close cooperation with faculty. In most departments, programs are designed for each graduate student according to individual interests, preparation, and experience, and a student's program may well cross departmental lines. The work is organized in the form of seminars, graduate courses, and individual supervised study.

Founded in 1885, the Bryn Mawr Graduate School was the first graduate school for women in the United States. Since 1931 both men and women have been admitted, but only after 1965 were adequate funds obtained to offer support for men comparable to that offered to women. In 1970 the Graduate School of Arts and Sciences and the Graduate School of Social Work and Social Research were organized as two distinct schools. Today, the total student enrollment in the Graduate School of Arts and Sciences is just under four hundred.

Graduate work leading to the degrees of Master of Arts and Doctor of Philosophy is available in:

<i>Anthropology</i>	<i>Greek</i>
<i>Biochemistry</i>	<i>History</i>
<i>Biology</i>	<i>History of Art</i>
<i>Chemistry</i>	<i>Latin</i>
<i>Classical and Near Eastern Archaeology</i>	<i>Mathematics</i>
<i>Economics</i>	<i>Philosophy</i>
<i>Education and Child Development</i>	<i>Physics</i>
<i>English</i>	<i>Political Science</i>
<i>French</i>	<i>Psychology</i>
<i>Geology</i>	<i>Russian</i>
<i>German</i>	<i>Sociology</i>
	<i>Spanish</i>

Work leading to the degrees of Master of Social Service, Master of Law and Social Policy, and Doctor of Philosophy is available in the Graduate School of Social Work and Social Research.

College Calendar 1981-82

The Graduate School of Arts and Sciences

First Semester—1981-82

- July 1 *Applications for loans due*
- Aug. 20 *Final date for filing completed applications for admission for 1981-82*
- Aug. 25 *Ph.D. dissertations in all fields except natural sciences and Mathematics must be submitted to the Office of the Graduate School of Arts and Sciences for the October 15 degree*
- Sept. 1, 2, 3, 4, 8 *Registration period for Semester I*
- Sept. 1 *Graduate residence opens*
- Sept. 3 *Convocation*
Work of the 97th academic year begins at 9 a.m.
- Sept. 8 *Ph.D. dissertations in the natural sciences and Mathematics must be submitted to the Office of the Graduate School of Arts and Sciences for the October 15 degree*
- Oct. 3 *German examinations for M.A. and Ph.D. candidates*
- Oct. 16 *Fall vacation begins after last class*
- Oct. 21 *Fall vacation ends at 9 a.m.*
- Oct. 24 *Spanish, Italian, Russian, Latin, Statistics examinations for M.A. and Ph.D. candidates*
- Oct. 31 *French examinations for M.A. and Ph.D. candidates*
- Nov. 25 *Thanksgiving holiday begins after last class*
- Nov. 30 *Thanksgiving holiday ends at 9 a.m.*
- Dec. 1 *Final date for filing completed applications for admission for Semester II*
- Dec. 7-11 *Registration period for Semester II*
- Dec. 23 *Winter vacation begins*

Second Semester—1981-82

- Jan. 18 Convocation
 Work of Semester II begins at 9 a.m.
- Jan. 20 *Applications for M.A. candidacy due in the Office of the Graduate School of Arts and Sciences*
- Jan. 25 *Final date for filing completed applications for scholarships (foreign students) for 1982-83*
- Feb. 1 *Final date for filing completed applications for fellowships, scholarships, and grants (citizens of the United States and Canada) for 1982-83*
- Feb. 20 *French examinations for M.A. and Ph.D. candidates*
- Feb. 27 *German examinations for M.A. and Ph.D. candidates*
- Mar. 6 *Spanish, Italian, Russian, Latin, Statistics examinations for M.A. and Ph.D. candidates*
- Mar. 12 *Spring vacation begins after last class*
- Mar. 22 *Spring vacation ends at 9 a.m.*
- Mar. 31 *Ph.D. dissertations in all fields except natural sciences and Mathematics must be submitted to the Office of the Graduate School of Arts and Sciences for May 1982 degree*
- Apr. 15 *M.A. theses due for candidates away from Bryn Mawr. (Candidates at Bryn Mawr should consult their department chairmen concerning deadlines.)*
- Apr. 20 *Ph.D. dissertations in the natural sciences and Mathematics must be submitted to the Office of the Graduate School of Arts and Sciences for May 1982 degree*
- Apr. 30 *Last day of classes*
- May 16 *Conferring of degrees and close of 97th academic year*

College Calendar 1982-83

The Graduate School of Arts and Sciences

Tentative Schedule

First Semester—1982-83

- Aug. 31, Sept. 1, 2, 3, 7 *Registration period for Semester I*
Sept. 2 *Work of the 98th academic year begins at 9 a.m.*
Oct. 15 *Fall vacation begins after last class*
Oct. 20 *Fall vacation ends at 9 a.m.*
Nov. 24 *Thanksgiving holiday begins after last class*
Nov. 29 *Thanksgiving holiday ends at 9 a.m.*
Dec. 6, 7, 8, 9, 10 *Registration for Semester II*
Dec. 22 *Winter vacation begins*

Second Semester—1982-83

- Jan. 17 *Work of Semester II begins at 9 a.m.*
Mar. 11 *Spring vacation begins after last class*
Mar. 21 *Spring vacation ends at 9 a.m.*
Apr. 29 *Last day of classes*
May 15 *Commencement*

Resources for Graduate Work at Bryn Mawr

The Mariam Coffin Canaday Library and the six auxiliary libraries of Bryn Mawr College, including the Art and Archaeology Library in the M. Carey Thomas Library, contain over 700,000 books, documents and microforms, and regularly receive more than 2000 periodicals as well as many scholarly series. The Library is open throughout the year with a liberal schedule of hours. Books are readily accessible on open stacks and in study rooms; individual carrels are available for advanced students.

The John D. Gordan Reference Center provides a focus for reference books and services in the Library. In its card catalog, the main entry cards of the Haverford College Library join those of the Bryn Mawr Library, thus bringing more than 980,000 entries into one file. The Library is a member of the Pennsylvania Area Library Network (PALINET), and holds, with Haverford and Swarthmore Colleges, the microfilm of the Union Library Catalogue of Pennsylvania, which locates approximately 7,200,000 volumes in the Philadelphia area and in the state, including the libraries of the American Philosophical Society, the Library Company of Philadelphia, the Historical Society of Pennsylvania, the Academy of Natural Sciences, the Free Library of Philadelphia, the Franklin Institute, the College of Physicians, the Rosenbach Foundation, the University of Pennsylvania and Temple University. In addition, through PALINET, the Library has access to the OCLC data bank of over 7,300,000 titles cataloged for academic and other libraries throughout the United States. The Library also began dial-access bibliographic research services in 1979.

The Rare Book Room houses the Marjorie Walter Goodhart Medieval Library of incunabula and medieval manuscripts. Important and extensive collections of early material on Latin America, Africa, and Asia are to be found in the Dillingham, McBride, and Plass collections. The Castle and Adelman collections expand the opportunities for the study of the graphic book-arts. The Adelman Collection also substantially increases the Library's holdings of literary and related manuscripts. In addition to these special collections are numerous other rare books and manuscripts.

Bryn Mawr has a study collection of archaeological and ethnological materials which is used for research by graduate and undergraduate students. The Ella Riegel Museum of Classical

Archaeology contains examples of the Greek and Roman arts, especially vases, and a small group of pre-classical antiquities. It includes the classical Greek coins assembled by Elisabeth Washburn King and the Aline Abaecherli Boyce Collection of Roman Republican silver coins, as well as the Densmore Curtis Collection presented by Clarissa Dryden. Professor Hetty Goldman donated an extensive series of pottery samples from the excavations at Tarsus in Cilicia. Old World Paleolithic, Neolithic, Paleo-Indian, Eastern Woodland, Southwestern, Middle Mississippian, and Mexican antiquities are also represented at Bryn Mawr in addition to the Ward Canaday Collection of outstanding examples of most of the known ceramic and textile traditions of Peru.

In addition, students in Archaeology and History of Art use the resources of the Philadelphia area: the Philadelphia Museum of Art, the Pennsylvania Academy of the Fine Arts, the Barnes Foundation, the Rodin Museum, the Rosenbach Museum, and the University Museum of the University of Pennsylvania.

Laboratories and classrooms for Anthropology and Psychology are in Dalton Hall. Laboratories, classrooms, and libraries for Biochemistry, Biology, Chemistry, Geology, Mathematics, and Physics are located in the three buildings of the Science Center. At the Center are rooms designed for work with radioactive materials, for photomicrography and for glassblowing; there is a machine shop for expert instrument makers in charge and a workshop available to graduate students. In addition to the usual equipment, special apparatus and instruments for particular research projects involving faculty and graduate students continue to be acquired through the Plan for the Coordination of the Sciences (see page 91), through research grants from industry and other private sources, and from government agencies.

The Geology Department has valuable materials for research, including the extensive working and reference mineral collections of Theodore D. Rand and George Vaux, Jr. The Department is also a map repository for the U.S. Geological Survey and the Defense Mapping Agency.

The College operates a Hewlett Packard 3000 Series III computer, featuring 1 Mbyte memory and 250 Mbytes mass storage, tape drive, card reader and two printers. Interactive computing is supported through twenty-five or more typewriter-like terminals in four locations on campus. The languages APL and FORTRAN are available, as well as the packages from IMSL (International Mathematical and Statistical Library), SPSS (Statistical Package for the Social Sciences), BMDP (biomedical statistical package from UCLA), and DYNAMO (Dynamic Modeling lan-

guage). Both CRT and color pen-and-ink computer graphics are supported. Bryn Mawr is a member of the UniColl Corporation, a regional computer consortium in Philadelphia which provides the resources and technical support of a major facility, offering access to a pair of IBM 370/168 computers and a library of languages and applications.

Admission to the Graduate School of Arts and Sciences

Requirements

Applicants are expected to be graduates of colleges or universities of acknowledged standing. For special requirements set by individual departments, see the departmental listings beginning on page 21.

Procedure

The applicant should write to the Dean of the Graduate School of Arts and Sciences, Bryn Mawr College, Bryn Mawr, Pennsylvania 19010, for application forms, indicating the field of special interest. The application must be supported by official transcripts of the student's complete academic record and by letters from the dean and two or more professors with whom he or she has done his or her major work. Although an interview is not required, candidates are encouraged to come in person to discuss their plans or the Bryn Mawr program. The applicant should write directly to the chairman of the department to arrange a meeting.

No application will be considered until all the necessary documents have been received. Students are accepted for either full-time or part-time work. For citizens of the United States and Canada and for foreign students presently in the United States, there is an application fee of \$25 which is not refundable.

Graduate Record Examinations

Applicants are advised to take the Graduate Record Examination Aptitude Test as well as the Advanced Tests in their fields of special interest. In certain departments these examinations are required, as indicated in the departmental listings. Inquiries concerning the Graduate Record Examinations and the dates on which they will be given should be addressed to Graduate Record Examination, Educational Testing Service, Box 955, Princeton, New Jersey 08540 or to Graduate Record Examination, Educational Testing Service, 1947 Center Street, Berkeley, California 94704.

Dates

1. *Citizens of the United States and Canada:*

Applications for admission in all departments must be complete by August 20. Departments with large numbers of

applicants may sometimes find it necessary to close the application period at an earlier date.

2. *Foreign applicants:*

The closing date for admission is August 20. Applications must include the scores of the Test of English as a Foreign Language (TOEFL), the Examination of the English Language Institute of the University of Michigan, or another approved language test. Since applications from students who desire financial aid must be completed by January 25, applicants must arrange to take language tests well before that date. For information concerning the TOEFL and the dates on which it is given, write to: TOEFL, Educational Testing Service, Princeton, New Jersey 08540. Students in departments requiring the Graduate Record Examination should have arranged to take these tests not later than October.

3. *Applicants for financial aid:*

Students wishing to apply for fellowships, scholarships, tuition grants, or other forms of financial aid must present complete applications by the following dates:

For United States and Canadian citizens:

Applications for fellowships, scholarships,
assistantships, full-time and part-time

tuition grants February 1

Applications for loans July 1

For foreign citizens:

Applications for scholarships January 25

GAPSFAS forms must be submitted to the Educational Testing Service, Princeton, New Jersey 08540 by January 15 (see page 87).

Admission to Graduate Seminars and Courses

Admission to graduate seminars and courses is under the jurisdiction of the various departments. Students whose preparation is inadequate may be required to enroll as special students to take appropriate undergraduate courses (for which no graduate credit is given). At the end of one or two semesters the department reviews the work of the special student and makes a recommendation to the Dean concerning the student's admission to the regular graduate program.

Requirements for Registration and Degree Candidacy

Registration

All graduate students, after consultation with the chairmen of their departments, must register at the Office of the Graduate School of Arts and Sciences in the M. Carey Thomas Library each semester during the registration period listed in the College Calendar. Changes in registration require the approval of the department chairman and the Dean.

Personal registration is an important obligation of the graduate student. Those who fail to register in the stated period will be charged a late registration fee.

Students wishing certification to outside agencies must complete a form to be signed also by the department chairman and deposited in the Office of the Graduate School of Arts and Sciences.

Continuing Enrollment, Leaves of Absence

Students who have been admitted to candidacy for the Ph.D. degree must, in order to retain their candidacy, register for one or more units of work each semester, or enroll under the continuing enrollment plan, or make formal application for leave.

Enrollment under the continuing enrollment plan does not carry academic credit, but permits the student to be certified as at least a half-time student. Once each year, departments must certify that students so enrolled are making adequate progress.

Leaves of absence may be granted by the Dean of the Graduate School of Arts and Sciences, with the approval of the department, for a semester or a full academic year, and may be renewed for an additional period, provided that the total does not exceed two academic years. Leaves of absence exceeding a total of two academic years can be granted only with the approval of the department, the Dean of the Graduate School of Arts and Sciences, and the Council of the Graduate School of Arts and Sciences. No fee is required of students granted leaves of absence, but students should recognize that leaves of absence may affect loan repayment obligations.

Candidates for the Ph.D. who are neither currently enrolled nor on formal leave forfeit candidacy.

Any graduate student, whether or not formally admitted to candidacy for a degree, must register for one or more units of work or enroll under the continuing enrollment plan if he or she plans to present himself or herself for College examinations, or use the College libraries or laboratories, or consult members of the faculty in relation to work in progress.

Degree Candidacy

Admission to the Graduate School of Arts and Sciences to work toward an M.A. or Ph.D. degree does not automatically confer candidate status. Graduate students formally become candidates for the M.A. or Ph.D. only after they have met departmental requirements and have made formal application for candidacy which has been approved by the Graduate Council of the Graduate School of Arts and Sciences.

Program of Study

The program of study consists of selected seminars, courses, or individual work under the close direction of members of the faculty. At Bryn Mawr College, the program in the Graduate School of Arts and Sciences is defined in terms of academic units. Three academic units constitute a full year's program. A year-long seminar counts as one academic unit; a one-semester seminar, or an upper-level undergraduate course taken for graduate credit, or a semester of supervised independent work counts as a half-unit.

A minimum of three academic units at Bryn Mawr is required for the degree of Master of Arts. Candidates for the degree of Doctor of Philosophy generally complete three full years of graduate work which must, with certain exceptions, include a minimum of six academic units at Bryn Mawr (see degree requirements, p.18).

For the list of advanced undergraduate courses which with additional work may be accepted as graduate units subject to the approval of department chairmen and the Dean of the Graduate School of Arts and Sciences, see the departmental offerings beginning on page 21.

In many departments, members of the faculty and graduate students meet from time to time in Journal Clubs or Colloquia to discuss current research or to review recent publications in their field of study.

Under the Reciprocal Plan, courses at the University of Pennsylvania Graduate School of Arts and Sciences are available to Bryn Mawr graduate students. All matriculated graduate students are eligible. The number of courses which may be taken at the University is limited to the equivalent of one unit per year. The procedure for registration and payment of tuition fees is the same as for students enrolled wholly at Bryn Mawr, with the exception that the student must present a letter of introduction to the Dean of the Graduate School of Arts and Sciences of the University of Pennsylvania when registering there. The University charges a small general fee for the use of the library, a library deposit, which is refundable, and fees for late registration. Ordinarily students are not advised to undertake such work during their first year at Bryn Mawr.

For graduate students in the biological sciences, there is, in addition, a Reciprocal Plan with the Medical College of Pennsylvania. See page 27 for a full description.

Grading System

Students in the Graduate School of Arts and Sciences at Bryn Mawr do not receive letter grades. At the completion of a unit or half-unit, the student's work is graded Satisfactory (S) or Unsatisfactory (U), and the instructor writes a narrative evaluation of the student's performance and ability to proceed with graduate work.

Teaching Apprenticeships

Since Bryn Mawr's approach to undergraduate education does not permit the employment of large numbers of teaching assistants, some departments now offer structured teaching apprenticeships, which permit a graduate student to work closely with a faculty member in the planning and teaching of a particular course. There is neither fee nor stipend in connection with these teaching apprenticeships, but the student's work with the course is evaluated and the experience becomes part of the student's permanent record.

Summer Work

Bryn Mawr has no regular graduate summer session on campus. The science departments, however, usually invite graduate students to continue with research projects over the summer and provide a modest stipend.

Summer Institutes Abroad

Bryn Mawr College offers summer programs of intensive language training and significant aspects of culture in three locations abroad. Certain courses carry graduate credit.

Institute d'Etudes Françaises d'Avignon

For information write to Dr. Michel Guggenheim, Department of French, Bryn Mawr College.

Centro de Estudios Hispánicos (Madrid)

For information write to Dr. Eleanor Paucker, Department of Spanish, Bryn Mawr College.

Pushkin Institute of the Russian Language (Moscow)

For information write to Dr. Dan E. Davidson, Department of Russian, Bryn Mawr College.

Massenzia

Bryn Mawr College has a graduate residence center in Rome: Massenzia, Via Appia Pignatelli 62, Roma 00178, presently under the direction of Professor Kyle M. Phillips, Jr. Graduate students of Bryn Mawr College and other academic institutions can reside at the center while engaged in research and writing. They participate in the lecture program and visits to special sites and monuments organized by Massenzia. Massenzia fellowships are available to Bryn Mawr students; see page 92.

Degree Requirements

The Graduate School of Arts and Sciences offers programs leading to the degrees of Master of Arts and Doctor of Philosophy.

The Degree of Master of Arts

The general requirements for the M.A. degree are as follows:

1. Undergraduate preparation in major and allied fields which is satisfactory to the departments concerned.

2. A knowledge of one modern foreign language and/or such additional foreign languages or special techniques as the individual departments may require. Students whose native language is not English, except for those majoring in the language and literature of their native tongue, are not required to present an additional language.

3. The completion of a satisfactory program of work endorsed by the department and accepted by the Council of the Graduate School of Arts and Sciences. Application for such endorsement must be submitted on appropriate forms to the Dean of the Graduate School of Arts and Sciences not later than one week after the beginning of the second semester of the academic year in which the candidate wishes to take the degree. The program of study must include three units of work: (1) one seminar or graduate course, (2) a second seminar or supervised unit of graduate work, (3) a third seminar or an undergraduate course recommended by the major department. If undergraduate courses are included in this last unit, they must be supplemented by additional individual work. Only one such course may be offered for the M.A. degree. Under certain circumstances advanced undergraduate courses in science can be counted as seminars, subject to the approval of the department and the Dean of the Graduate School of Arts and Sciences. Candidates whose major department conducts a Journal Club or Colloquium are expected to include it in their program.

4. The preparation of a paper in a special field normally related to one of the seminars or units of graduate work in the candidate's program. Candidates currently at Bryn Mawr College shall submit this paper by the date set by the department. Candidates not currently on campus must submit the paper 30 days before Commencement in the academic year of their candidacy.

5. Each candidate, after all other requirements have been completed, must pass a Final Examination.

6. Work for the degree may be spread over several years which need not be in succession but must be included in a five-year period (60 months).

The Degree of Doctor of Philosophy

The course of study is designed to prepare students for professional careers as scholars and teachers. Candidates should have ability of high order, intellectual curiosity, critical judgment, independence, a broad general education, fundamental training in the major and allied fields, and the determination needed to carry through an exacting program.

The general requirements, to which should be added those of the various departments, are as follows:

1. Undergraduate preparation in major and allied fields which is satisfactory to the departments concerned and to the Council of the Graduate School of Arts and Sciences.

2. A minimum of three full years of work beyond the A.B. degree in major and allied fields. Graduates of other colleges must complete at least six academic units at the Graduate School of Arts and Sciences of Bryn Mawr College (residence requirement). Each doctoral candidate must complete at least one unit of supervised work on the dissertation. This unit may be part of (but often is taken in addition to) the six units of the residence requirement. The residence requirement may be reduced by the Council of the Graduate School of Arts and Sciences for candidates who have held academic appointments for two or more years at Bryn Mawr College and occasionally for others. Students who hold the A.B. degree from Bryn Mawr College must complete a minimum of three academic units at Bryn Mawr.

3. The recommendation of the student as a candidate by the director of the dissertation and the major department and the acceptance of the recommendation by the Council of the Graduate School of Arts and Sciences. Application for candidacy, on a form to be obtained at the Office of the Dean of the Graduate School of Arts and Sciences, may be made as early as the spring of the student's first year, provided that the student has been registered for two units of graduate work at Bryn Mawr.

4. Knowledge of the foreign languages, computer languages (such as FORTRAN, ALGOL, PL/I, etc.), and special techniques (such as statistics) required by the individual departments. In certain circumstances, students whose native language is not English may offer English for one of the languages. These requirements must be fulfilled before the student takes the Preliminary Examinations.

5. Satisfactory Preliminary Examinations in the fields established for the candidate. These examinations are intended to test the candidate's knowledge of the principles of the subject, exemplified by the command of several fields or areas, the ability to apply knowledge to new problems, and power of organization.

6. The preparation of a dissertation worthy of publication, which presents the results of independent investigation in the fields of the major subject and contains original material, results, or interpretations.

7. A satisfactory Final Oral Examination devoted to the dissertation and the special field in which it has been written.

8. The publication of the dissertation in whole or part. Microfilming is accepted as a method of publication.

A special pamphlet describing regulations for the Ph.D. degree is issued to students applying for candidacy. Candidates for the Ph.D. should particularly note the requirement for continuous registration once a student has been accepted for candidacy and should also note that if any part of the Preliminary Examinations has been taken more than five years (60 months) before the Final Examination, the Final Examinations must be both written and oral, and must cover one of the general fields or areas offered for the Preliminary Examinations.

Graduate Program in Arts and Sciences

Graduate Faculty

Faculty on leave during all or part of the academic year are listed in Appendix A.

Graduate Seminars and Courses

In many cases, the seminars listed in this catalogue represent only those typically or recently offered by the department. There is no assurance that a given seminar will be offered in any one year, unless the department so indicates. Questions concerning the availability of specific seminars or courses in a particular year should be addressed to the individual department chairmen.

Upper-level undergraduate courses which may with additional work be taken for graduate credit are listed by number. The letter "a" following a number indicates a course given in the first semester; the letter "b" indicates a course given in the second semester; the letter "c" indicates a course given two hours a week throughout the year. (Undergraduate course numbers are being changed and may not correspond in every case with the number listed here. Check a current course listing before registering.)

Special graduate requirements are listed under each department. For the general degree requirements for the M.A. and Ph.D., see page 18.

Anthropology

Professor: Jane C. Goodale, Ph.D.

Associate Professors: Richard S. Davis, Ph.D.
Richard H. Jordan, Ph.D.
Philip L. Kilbride, Ph.D., *Chairman*
Judith R. Shapiro, Ph.D.

Professor of Linguistics in Anthropology and German:
Nancy C. Dorian, Ph.D.

Prerequisites. A good undergraduate preparation in Anthropology or a closely related discipline is desirable. Scores of the

Graduate Record Examination Aptitude Test are required for admission. Students whose undergraduate training is not entirely adequate will be required to take such undergraduate courses as may seem necessary.

Language Requirements. Candidates for the M.A. or Ph.D. must offer one of the following two options: (1) two modern languages (French, German, Russian, Spanish) or (2) one modern language (French, German, Russian, Spanish) and statistics or computer science. Language skills will be tested by examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr. Competence in statistics and computer science will be acknowledged when the student satisfactorily passes an approved graduate course in statistics or computer science. The statistics requirement may also be fulfilled by passing an examination administered by the Department.

Program and Examination for the M.A. For students with an excellent undergraduate preparation, the program may consist of a minimum of three units of work in seminars or advanced undergraduate courses arranged for graduate credit, one of which may be in an allied subject. The program usually takes two years. The M.A. paper may be based on an essay offered in a seminar. The Final Examination consists of one four-hour written examination, but the Ph.D. Preliminary Examinations may be substituted for the M.A. Examination. All graduate students are expected to take the M.A. before proceeding to the Ph.D. Those who enter Bryn Mawr College with an M.A. in Anthropology may petition the Department to proceed directly to the Ph.D. program.

Program and Examination for the Ph.D. The Department emphasizes the holistic nature of the anthropological discipline and will expect each student to become familiar with various cultural, social, and archaeological approaches and the anthropology of at least two geographical regions, in addition to areas and topics of professional specialization.

The Preliminary Examinations for candidates for the Ph.D. (usually taken near the end of the third year of graduate work) will consist of three four-hour written examinations and an oral examination of one hour. Students must also have a research proposal approved by the supervising committee.

Since the dissertation is usually based upon field work, it is difficult for a student to obtain the degree in less than five years.

General Degree Requirements for the M.A. and the Ph.D. See page 18

SEMINARS AND GRADUATE COURSES

Four or five seminars are offered each semester. Rarely is the same seminar offered in consecutive years in order to allow the greatest possible choice and variety to each student over a two- to three- year period. For advanced students units of supervised readings are sometimes substituted for seminars. Topics listed below indicate the areas in which seminars will be offered according to the needs of students.

Mr. Davis

Paleoecology

Miss Dorian

Linguistic Techniques and Field Methods

Socio-Linguistics

Miss Goodale

Topics in Oceanic Ethnography (Australia, Melanesia, Polynesia and Micronesia)

Methods in Ethnographic Research

Social Organization

Mr. Jordan

Arctic Archaeology

Environmental Archaeology

History of Archaeological Theory

Human Evolution and Old World Prehistory

Mr. Kilbride

Topics in African Ethnography

Psychological Anthropology

Cultural Dynamics and Modernization

Quantitative Methods of Analysis

Miss Shapiro

Topics in Lowland South-American Ethnography

Sex Roles

Linguistic Anthropology

Topics in Social and Cultural Theory

Missionization

SELECTED UNDERGRADUATE COURSES

- 302 *Africa: Sub-Saharan Ethnology*: Mr. Kilbride
- 303 *Oceania: Topics in Melanesian Ethnography*: Miss Goodale
- 305 *Native Cultures of South America*: Miss Shapiro
- 306 *Origins of Civilization and the State*: Mr. Davis

- 308 *Language in the Social Context*: Miss Dorian
- 313 *Linguistic Anthropology*: Miss Shapiro
- 314 *Comparative Hunters and Gatherers*: Mr. Davis
- 320 *Cultural Theory*: Mr. Davis
- 321 *Psychological Anthropology*: Mr. Kilbride
- 324 *Cultural Ecology*: Mr. Jordan

In addition, courses at the University of Pennsylvania are available under the terms of the Reciprocal Plan (see page 15).

Biochemistry

Committee on Biochemistry:

Professor of Biology: Robert L. Conner, Ph.D.

Professor of Chemistry: Ernst Berliner, Ph.D.

Associate Professor of Biology: David J. Prescott, Ph.D., *Chairman*

Assistant Professor of Chemistry: Kenneth G. Strothkamp, Ph.D.

This interdisciplinary program offers work within the Departments of Biology and Chemistry and leads to the M.A. or Ph.D. degree. It is administered by the Committee on Biochemistry, which consists of members of the two departments. Depending on their backgrounds and interests, students may enter the program either through the Department of Biology or the Department of Chemistry.

Prerequisites. Undergraduate degree with a major or its equivalent in either Biology or Chemistry.

Major and Allied Subjects. Students will receive their advanced degrees in either Biology or Chemistry with a major in Biochemistry. The allied field will usually be a branch of Biology or Chemistry different from Biochemistry. It may also be selected from fields in Biophysics, Physics, Mathematics, or Psychology. Other combinations may be accepted with the approval of the Committee and the Council of the Graduate School of Arts and Sciences.

Language Requirements. See the requirements set by each department.

Program and Examination for the M.A. Students who are candidates for the M.A. will usually offer one unit of seminar or course work in either Biology or Chemistry and an additional unit of work in Biochemistry. A third unit of work consists of an experimental

investigation carried out under the direction of a member of either department. The results of this unit must be made the subject of a written paper. The Final Examination consists of a four-hour written examination or a three-hour written and one-hour oral examination.

Program and Examinations for the Ph.D. All students must take the core curriculum in Biochemistry, which includes Biochemistry 353a and b, or its equivalent if taken elsewhere, and a series of graduate courses and seminars in Biochemistry. Students should note that one semester of physical chemistry emphasizing thermodynamics is pre- or co-requisite for admission to the graduate courses in Biochemistry. At least one-half unit of physiology, cell biology, genetics, or developmental biology is also required. In addition, students will usually take other graduate courses or seminars, depending on their interests, in either department in order to acquire a broad general background for research or teaching in Biochemistry. They will usually devote a large portion of their time to research carried out under the direction of a member of the Committee on Biochemistry. The Preliminary and Final Examinations are taken in accordance with the regulations set by the department in which the student is enrolled.

General Degree Requirements for the M.A. and the Ph.D. see page 18.

SEMINARS AND GRADUATE COURSES

See listings under the Departments of Biology and Chemistry.

SELECTED UNDERGRADUATE COURSES

See listings under the Departments of Biology and Chemistry.

Biology

Professors: Robert L. Conner, Ph.D. *Chairman*
Betty M. Twarog, Ph.D.

Associate Professors: Anthony R. Kaney, Ph.D.
David J. Prescott, Ph.D.

Lecturers: Betzabé Praeger, Ph.D.
Patricia Onderdonk Pruett, Ph.D.

Assistant Professor of Chemistry: Kenneth Strothkamp, Ph.D.

Prerequisites. An undergraduate major in Biology, Zoology, or Botany, including courses in general and organic chemistry.

Some college-level preparation in Mathematics and Physics is desirable. Students with majors in other subjects may be admitted but will be required to make up any deficiencies in their preparation in Biology before being admitted to graduate courses. All applicants should submit scores from the Graduate Record Examination Aptitude Test and the Advanced Test in Biology.

Major and Allied Subjects. Candidates for the M.A. and Ph.D. degrees may specialize in cell biology, cellular physiology, developmental biology, genetics, molecular biology, neurochemistry, or neurophysiology, but must take work also from areas not chosen for specialization. Candidates may also major in biochemistry through the Biochemistry Program (see page 00). Allied subjects may be selected from fields in Chemistry, Physics, and Psychology, and in special cases from other related fields, with the approval of the Council of the Graduate School of Arts and Sciences.

Language Requirements. Candidates for the M.A. degree should offer French, German, or statistics. Candidates for the Ph.D. degree must offer two foreign languages: French and German (or some other language by special permission of the Department and the Council of the Graduate School of Arts and Sciences), or one foreign language and statistics. The statistics requirement may be satisfied by passing a graduate course in statistics at Bryn Mawr or by examination administered by the Biology Department. Language skills will be tested by the examinations administered by Bryn Mawr College.

Program and Examination for the M.A. One full year, or its equivalent, of course work in seminars and advanced undergraduate courses arranged for seminar credit and a written report on a piece of experimental work carried out under the direction of a member of the Department. Qualified students may substitute a unit of supervised research for formal course work. The Final Examination consists of a three-hour written examination covering the areas of study and a one-hour oral examination concentrating particularly on the interpretation and significance of the experimental problem and its relation to biology more generally.

Program and Examinations for the Ph.D. The Preliminary Examinations for the Ph.D. consist of three written examinations, each of four hours' duration, and an oral examination of one to two hours. These examinations will cover the areas included in the course work in the major and allied fields. After the subject of the dissertation has been decided, the student will meet with the faculty of the Department to outline and discuss the subject and the proposed plan of research. The Final Examination is oral, cover-

ing the subject of the dissertation in relation to the general field of Biology.

General Degree Requirements for the M.A. and Ph.D. The Department expects all graduate students to become biologists who are professionals both in research and in education. It is anticipated that all graduate students will gain experience in teaching, usually in the capacity of a teaching assistant. See also page 18.

Cooperation with the Medical College of Pennsylvania. Students formally enrolled in the Graduate Program in Biology at Bryn Mawr College or in the Graduate School of Medical Sciences of the Medical College of Pennsylvania are permitted to take one graduate course per semester at the counterpart institution for credit and without payment of additional tuition for fees.

Graduate courses may be offered in which the instruction is shared by faculty members of the Biology department of Bryn Mawr College and the GSMS/MCP. In each case, one member of either faculty serves as course director. A joint course is offered on Molecular Aspects of Cell Structure and Function.

GRADUATE COURSES

Mr. Prescott

Advanced Biochemistry (Semester I)

A detailed examination of the structure and function of selected proteins. Physical and chemical means of determining the structure of macromolecules will be emphasized. Two hours' lecture. Prerequisite or equivalent—Interdepartmental 353a and b. Prerequisite or co-requisite or equivalent—Semester I of Chemistry 203.

Mr. Strothkamp

Advanced Biochemistry (Semester II)

The kinetics and mechanisms of several enzyme systems will be examined in detail. Metalloenzymes will be emphasized. Two hours' lecture.

Faculty of Biology Department and Medical College of Pennsylvania

Molecular Aspects of Cell Structure and Function
(Semester I and II)

This course is designed to provide an introduction to current concepts in molecular and cellular biology to individuals who have had some previous undergraduate training in biology and/ or chemistry. The course will be particularly useful to individuals who are considering re-entry into graduate programs in the biological sciences. A series of integrated lectures

on cellular organization, structure and function will provide an interdisciplinary overview of biochemistry, cell and molecular biology, microbiology, immunology, genetics and pathology. The course will be divided into four sections:

- I. Cellular Biology and Biochemistry
- II. Viruses, Bacteria and Eukaryotic Cells
- III. Cellular Genetics
- IV. Molecular Aspects of the Disease State

For Statistics: See offerings in the Graduate School of Social Work and Social Research and the Department of Psychology.

Journal Club: All faculty members and graduate students meet each week for presentation of current research in Biology. Graduate students, faculty, and outside speakers will participate.

SEMINARS

All seminars and advanced undergraduate courses arranged for seminar credit are offered for one semester each year. Four seminars are offered each year, with each area being offered in alternate years. The topics considered in any semester are selected in accordance with the needs and desires of the students enrolled. A list of seminar topics offered in each area in recent years is given below:

Cellular Physiology

- Membrane Structure and Function
- Regulation of Lipid Metabolism
- Molecular Endocrinology

Genetics

- Somatic Cell Genetics
- Genetics of Ciliated Protozoans
- Structure and Function of the Chromosome

Developmental Biology

- Gametogenesis and Development
- Fertilization
- Sex Differentiation

Biochemistry

- Neurochemistry
- Protein Structure and Chemistry
- Peptide Hormones

Neurophysiology

Organization of Motor Systems

Cyclic Nucleotide Involvement in Neural Functioning

SELECTED UNDERGRADUATE COURSES

The following advanced undergraduate courses with supplemental work may be taken for graduate credit.

350b *Problems in Cell Physiology*: Mr. Conner351a *Problems in Genetics*: Mr. Kaney353 *Biochemistry*: Mr. Conner, Mr. Prescott, Mr. Strothkamp355a *Problems in Neurophysiology*358a *Analysis of Development*362 *Cellular Physiology*: Mr. ConnerInt. 357a *Computer Usage in the Life Sciences*: Mrs. Pruett

Chemistry

Professors: Jay Martin Anderson, Ph.D., *Director of Computing Services*

Ernst Berliner, Ph.D., *Chairman*

Frank B. Mallory, Ph.D.

George L. Zimmerman, Ph.D.

Associate Professor: Joseph Varimbi, Ph.D.*Assistant Professors*: Geraldine Richmond, Ph.D.

Kenneth G. Strothkamp, Ph.D.

Charles S. Swindell, Ph.D.

Lecturer: Frances Bondhus Berliner, Ph.D.*Associate Professor of Biology*: David J. Prescott, Ph.D.

Fields of Study and Research. The primary aim of the instruction of graduate students in the Department of Chemistry is to provide a sound background in modern chemistry and to prepare men and women for a professional career in academic or industrial research or in teaching. Courses and seminars are offered to enable the students to acquire a command of their chosen fields, in addition to a sufficiently broad general background so that they will be prepared for the variety of assignments in chemistry teaching or research which they may later encounter. Thesis research is the major part of the training. Research training is centered on a variety of investigations carried out by the members of the faculty.

Currently there are active research programs involving both faculty and students in the following areas of organic, inorganic, physical, and theoretical chemistry, and of biochemistry: kinetics of electrophilic substitution and addition, relative reactivities of polynuclear aromatic systems, organic photochemistry, nuclear magnetic resonance as applied to substituent effects and through-space nuclear coupling, synthetic organic chemistry, synthesis of naturally occurring alkaloids and related compounds, study of amine oxide stabilized carbanions, reactions and electrochemical studies in liquid ammonia and other non-aqueous solvents, gas phase and solution photochemical isomerization and dissociation and molecular spectroscopy, theoretical quantum chemistry and nuclear magnetic relaxation, laser optoacoustic studies of weak absorption, two-photon absorption, and photoisomerization in liquids, structure and function of copper proteins, evolution of metalloproteins, and binding of metal ions to nucleic acids.

Under the Plan for the Coordination of the Sciences there are special opportunities for research and training in such interrelated areas as geochemistry, chemical physics, etc. See page 91.

Prerequisites. An undergraduate preparation in chemistry including courses in inorganic, analytical, organic, and physical chemistry, college physics, and mathematics (calculus). All applicants should submit scores on the Graduate Record Examination Aptitude Tests and Advanced Test in Chemistry. Applicants lacking some of these prerequisites may be considered for admission under special circumstances in consultation with the Department.

Major and Allied Subjects. Students may specialize in organic, inorganic, or physical chemistry; they may also specialize in biochemistry within the biochemistry program. See page 24. The allied subject for the Ph.D. may be chosen from the fields of mathematics, physics, inorganic geology, biology, and a branch of chemistry different from that of the major subject. Other combinations may be accepted with the approval of the Council of the Graduate School of Arts and Sciences and on the recommendation of the Department. The typical work for the allied subject would be a year's course or seminar on an approved level.

Language Requirements. Candidates for the M.A. must offer German, French, or Russian. Candidates for the Ph.D. may offer two of the following: German, French, Russian, or demonstrated skill in digital computation, numerical analysis, and the theory of error. This skill is tested by an examination consisting of two parts, a practical part requiring the writing and successful execu-

tion of a FORTRAN (or other equivalent language) program and a written description of the mathematical basis and a documentation of the program, or by a satisfactory grade in an appropriate course.

Language skills will be tested by examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

Program and Examination for the M.A. Students who are candidates for the M.A. will usually offer one seminar in their special field, another seminar or advanced undergraduate course in chemistry or an allied field, and one unit of research. This unit consists of an experimental or theoretical investigation carried out under the direction of a member of the Department. The Final Examination consists of a four-hour written examination or a three-hour written and one-hour oral examination.

Program and Examinations for the Ph.D. Ph.D. students will normally be expected to devote a large portion of their time to experimental or theoretical research carried out under the direction of a member of the Department. They will usually take all seminars offered in their special fields during their stay at Bryn Mawr, in addition to such courses as will give them a broad background in chemistry. The Preliminary Examinations will normally be taken in the student's third year of graduate study. They consist of two four-hour written examinations and two oral examinations. The two written examinations will be from the candidate's major field. One will be an examination in the general aspects of that field. The second will be in the special field of the candidate's research and will include questions designed to test familiarity with, and ability to interpret, material from the recent chemical literature. One of the oral examinations will be held soon after the written examinations have been completed and will be for the purpose of clarifying and augmenting the candidate's responses on the two written examinations. The three examinations described so far must be completed within a period of five weeks. The other oral examination will involve the defense of two original chemical research proposals previously submitted by the candidate. No more than one of these proposals may deal with work related to the special field of the student's research. All four of the examinations must be completed within a period of one year.

The Final Examination is oral and is devoted to the subject matter of the student's dissertation.

General Degree Requirements for the M.A. and the Ph.D. see page 18.

Colloquium. All members of the Department and the graduate students meet every week for a presentation of current research in chemistry, usually by outside speakers.

SEMINARS AND GRADUATE COURSES

In order to meet the needs of the students and to offer them as wide a selection of topics as possible, the seminars are arranged in such a way that each one is usually given at least once within a three-year period. The topics listed below are given in one-semester seminars, counting one-half unit of credit each. Ordinarily four seminars are offered each year. Individual programs are flexible, and the contents of the seminars are likely to vary with the research interests of the students and the current research activities of the faculty.

The seminars listed below are illustrative of those that have been offered in recent years.

Mr. Anderson

Theoretical Quantum Chemistry
Non-equilibrium Thermodynamics

Mr. Berliner

Physical Organic Aspects of Aromatic Chemistry
Physical Organic Chemistry
Structure and Physical Properties of Organic Compounds

Mr. Mallory

Organic Photochemistry
Spectral Applications in Current Organic Chemistry

Miss Richmond

Laser Spectroscopy and Photochemistry
Chemical Kinetics

Mr. Strothkamp

Spectroscopic Methods for Studying Biological Macromolecules
Occurrence and Function of Metal Ions in Biological Systems

Mr. Swindell

Synthetic Applications of Pericyclic Reactions
Selected Topics in Terpene Chemistry

Mr. Varimbi

Special Topics in Inorganic Chemistry
Statistical Thermodynamics

Mr. Zimmerman
Surface Chemistry
Quantum Chemistry and Spectroscopy of Molecules
Photochemistry

For additional seminars in Biochemistry, see the Department of Biology.

SELECTED UNDERGRADUATE COURSES

The following undergraduate courses may be taken for graduate credit.

- 301b *Advanced Inorganic Chemistry*
- 302 *Advanced Organic Chemistry*
- 303a *Quantum Mechanics of Atoms and Molecules*
- 303b *Atomic and Molecular Spectroscopy*
- 353 *Biochemistry*
- 356b *Biochemical Mechanisms*

Classical and Near Eastern Archaeology

Professors: Richard S. Ellis, Ph.D.
 Machteld J. Mellink, Ph.D., *Chairman*
 Kyle M. Phillips, Jr., Ph.D., *Resident Director*
of Massenzia, Rome
 Brunilde S. Ridgway, Ph.D.

Associate Professor: Gloria F. Pinney, Ph.D.

Assistant Professors: James C. Wright, Ph.D.
 Kathleen S. Wright, Ph.D.

Professor of Classical and Near Eastern Archaeology
and of History of Art: Phyllis Pray Bober, Ph.D.

Prerequisites. An undergraduate major in Archaeology or at least two courses in Archaeology or Ancient Art combined with a major in History of Art, Anthropology, Greek, Latin, or Ancient History. It is expected that students of Classical Archaeology will have a basic knowledge of Greek, Latin, and ancient history, and a reading knowledge of German and French (or Italian). For students of Near Eastern Archaeology the prerequisites are ancient history and a reading knowledge of German and French (or Ital-

ian); some preliminary study of an ancient Near Eastern language is desirable. Each application will be judged individually on its aims and soundness of preparation. All applicants must submit scores of the Aptitude Test of the Graduate Record Examinations.

Fields of Study and Allied Subjects. There are two fields of concentration: 1. The art and archaeology of the Greek and Roman world and its Mediterranean predecessors; 2. the art and archaeology of the ancient Near East. These fields may be combined in a program of major and allied subjects. Allied subjects are ancient languages (Greek, Linear B, Latin, Sumerian, Akkadian, Ugaritic, Hebrew, Hittite, Egyptian), ancient history, History of Art, Anthropology, or a science related to the program of the student.

Language Requirements. For the M.A. and Ph.D., a good reading knowledge of German and French. For the Ph.D., a reading knowledge of one ancient language. Modern language skills will be tested by examinations administered by Bryn Mawr College.

Program and Examination for the M.A. Three units of work in Archaeology or in Archaeology and an allied field; a research paper prepared under the supervision of a departmental adviser; three hours of written examination concerning the field in which the research paper was undertaken; one hour of oral examination to discuss the results. This M.A. is prerequisite for the Ph.D. program and will normally take two years to complete.

Program and Examinations for the Ph.D. After completion of the M.A. program students continue to take seminars and supervised work in preparation for the Preliminary Examinations and the Ph.D. dissertation. A program of study is designed for each individual student in consultation with the Department. Four special fields of study (one of which may be an allied field) are prepared for the Preliminary Examinations. The examinations consist of four four-hour papers and an oral examination.

All graduate students are encouraged to spend their third or fourth year of graduate study abroad. Students in Classical Archaeology are advised to spend a year at the American School of Classical Studies in Athens. For study in Italy, Bryn Mawr College now sponsors Massenzia, a graduate study center in Rome. Students of Near Eastern Archaeology will be advised to attend a center of archaeological research in their area of concentration. Museums in Europe and the Near East should be visited in the course of the year(s) spent abroad. Participation in excavations under the auspices of Bryn Mawr College or other schools is arranged when possible.

Depending upon individual study programs, the Preliminary

Examinations are normally taken at the end of the third or in the course of the fourth year of graduate study.

General Degree Requirements for the M.A. and the Ph.D. See page 18.

Excavations. The Department has sponsored excavation projects in Turkey and Italy. At present two projects are nearing the stage of completion.

- I. An investigation of the Bronze Age habitation of ancient Lycia in southwestern Turkey, and of painted tomb chambers in this area. The final publication is being prepared on the basis of joint field reports by the participants (cf. *American Journal of Archaeology* annual reports from 68 [1964] to 80 [1976], most recently 80 [1976] pp. 377-391).
- II. The Etruscan project, started in 1966, is the excavation of the archaic site of Murlo near Siena, organized in cooperation with the Archaeological Museum in Florence. Summer programs are organized jointly by Bryn Mawr College-Massenzia and Bowdoin College (cf. *American Journal of Archaeology* annual reports from 71 [1967] to 81 [1977], most recently 81 [1977] pp. 85-100).
- III. The Gritille Project is the salvage excavation of a site on the Euphrates in southeastern Turkey (ancient Commagene), which will be destroyed as a result of dam construction farther downstream. Gritille was occupied from the fourth millennium B.C. to medieval times. Excavations began in 1981 and will continue for three to five seasons. Graduate students participate as staff members.

Cooperation with the University of Pennsylvania. Attention is drawn to the courses offered by the Departments of Classical Archaeology, Anthropology, History of Art, Oriental Studies, and Biblical Archaeology at the University of Pennsylvania. Under the Reciprocal Plan (see page 15), students may register for a unit of work at the University or pursue research at the University Museum.

SEMINARS AND GRADUATE COURSES

Seminar topics are determined for each semester in consultation with the graduate students. In Semester I, 1981-82, four seminars concentrate on the Dark Ages in Greece and adjacent areas (1200-800 B.C.). There are plenary sessions of all four seminars as well as separate study groups with individual instructors. The listing of other seminar topics is representative of the range of subjects to be offered in the future.

Mrs. Bober

Roman Portraiture (Semester II, 1981-82)
The Art of Late Antiquity
The Survival of Antiquity in the Renaissance
Roman Sarcophagi, Problems in Style and Iconography

Mr. Ellis

The Early Iron Age in the Levant (Semester I, 1981-82)
Mesopotamian Civilization (Semester II, 1981-82)
The Archaeology of Ur, Assur, and Babylon
The Art of the Assyrian Palaces
Syro-Hittite Sites and their Art
Syro-Phoenician Metalwork and Ivories
The Archaeology of the Hebrew Kingdoms
The Archaeology of Elam

Miss Mellink

The Early Iron Age in Anatolia (Semester I, 1981-82)
Hittites and Mycenaeans (Semester II, 1981-82)
Anatolian Architecture
Minoan and Mycenaean Religion
Hittite Art

Mrs. Pinney

Greece in the Later Iron Age (Semester I, 1981-82)
Monumental Painting (Semester II, 1981-82)
Etruria in the Sixth Century B.C.
Greek Vase Painting

Mrs. Ridgway

Greek Sculpture of the Fifth Century B.C.
Hellenistic Sculpture
Roman Copies of Greek Sculpture
Julio-Claudian Sculpture
Architecture of Magna Graecia

Mr. Wright

The Early Iron Age in the Aegean (Semester I, 1981-82)
Problems in the Study of Greek Cities (Semester II, 1981-82)
Problems in Greek Architecture
Mycenaean Citadels
The Early and Middle Bronze Age in the Aegean

Mrs. Wright

Delos
Colonies and Cities in Roman Greece
The Near East in Hellenistic and Roman Times
Problems in Roman Pottery Trade

SELECTED UNDERGRADUATE COURSES

Incoming students with incomplete preparation in Archaeology will be advised to take selected undergraduate courses (with additional work for graduate credit) during their first years in graduate school.

- 201b *Egypt and Mesopotamia Before 1600 B.C.*: Mr. Ellis
- 203a *Greek Sculpture*: Mrs. Ridgway
- 203b *Hellenistic and Roman Sculpture*: Mrs. Pinney
- 205a (History) *The Ancient Near East*: Mr. Ellis
- 205b *Aegean Archaeology*: Mr. Wright
- 206a *Egyptian Archaeology*: Mr. Ellis
- 301b *Greek Vase-Painting*: Mrs. Pinney
- 302a *Greek Architecture*: Mr. Wright
- 302b *Roman Architecture*: Mr. Scott
- 303a *Etruscan Archaeology*: Mrs. Pinney
- 304b *Monumental Painting*: Mrs. Pinney

Economics

Professor: Richard B. Du Boff, Ph.D., *Chairman*

Associate Professors: Noel J. J. Farley, Ph.D.

Helen Manning Hunter, Ph.D.

Lecturer: Frances E. Altvatter, A.B.

Prerequisites. An undergraduate major in Economics, with work in such related fields as History and Political Science. Superior applicants with majors in other disciplines may be admitted. Applicants must submit scores on the Aptitude Test and Advanced Tests of the Graduate Record Examinations. Students whose undergraduate training in Economics is incomplete may be required to take such undergraduate courses as the Department thinks necessary.

Allied Subjects. Most subjects in the other social sciences and in History and Philosophy are acceptable. Mathematics and statistics are necessary to advanced work in Economics.

Language Requirements. Candidates for the M.A. and Ph.D. must show reading proficiency in one modern foreign language. Candidates for the Ph.D. must in addition show either reading proficiency in a second modern foreign language or proficiency in

Mathematics beyond the level required for admission to graduate seminars in Economics (i.e., beyond the level of first-year college calculus and basic linear algebra). Mathematical skills will be tested by an examination to be set by the Department. The topics to be covered will be agreed upon in advance and may vary according to the student's particular field of interest in Economics.

Language skills will be tested by examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

Program and Examination for the M.A. It is expected that the work for the M.A. degree will require not less than one calendar year of graduate study. All candidates for the M.A. degree must complete three units of formal course work (seminars, courses, and supervised units) prior to submitting the M.A. research paper. One of these units must be in economic theory, one in statistics and econometrics, and one in the student's special field of interest. Course examinations in each of these three fields must be passed before the candidate presents the research paper. After acceptance of the paper a Final Examination must be passed.

Program and Examinations for the Ph.D. Candidates for the Ph.D. will take as much formal course work as is necessary to prepare them for the Ph.D. examinations. The Preliminary Examinations will consist of four three-hour written papers and an oral examination; one of the written papers will be in microeconomic analysis and one in macroeconomic analysis; the other two papers will be in fields related to the candidate's major interest. The Final Oral will be devoted to the subject matter of the dissertation.

General Degree Requirements for the M.A. and the Ph.D. See page 18.

SEMINARS

Seminars are chosen each year from the following topics:

Miss Altvatter

Industrial Organization

Microeconomic Analysis

Mr. Du Boff

American Economic Development

Economic History and Growth 1750-1970

Mr. Farley

International Economic Development

International Trade Theory

Mrs. Hunter
Econometrics
Macroeconomic Analysis

Education and Child Development

Professors: Janet L. Hoopes, Ph.D., *Chairman, and Director*
of the Child Study Institute

Ethel W. Maw, Ph.D.

Emmy A. Pepitone, Ph.D.

Associate Professors: Susan E. Maxfield, M.S., *Director of the Phebe*
Anna Thorne School

Faye P. Soffen, Ed.D.

Robert H. Wozniak, Ph.D.

Lecturers: Ruth B. Harvey, Ph.D.

Thelma-rose B. Steiger, Ph.D.

Instructor: Frank J. Schwoeri, M.A.

The program emphasizes extensive knowledge of human development in a variety of social contexts to provide the foundation for specialization in college teaching, research, and practice: child clinical development, educational psychology, school psychology, counseling, secondary education, and early childhood education. The typical program of study includes research and field experience in educational and mental health settings as well as participation in seminars.

Bryn Mawr has program approval from the Pennsylvania Department of Education for several curriculum sequences which prepare candidates for public school professions. These courses of study include teacher education in ten liberal arts fields, school psychology, and school counseling, both elementary and secondary. Students who satisfactorily complete an approved program will, on the recommendation of this Department, receive the state certificate in the appropriate field.

Prerequisites. An undergraduate preparation in the liberal arts which must include work in general psychology and statistics. Students whose undergraduate training in psychology is not adequate will be required to take such undergraduate courses as seem necessary. Applicants for admission are asked to submit scores of the Graduate Record Examination Aptitude Test or Miller Analogies Test, and a statement of their academic plans

and goals. Undergraduate grades of at least B level are necessary.

Major and Allied Subjects. The Department offers study in several areas: developmental, educational, social and clinical. The program provides for concentration in several fields within each of these areas based on the courses listed below. For the M.A., two fields are required. For the Ph.D., four fields which represent three of the areas must be presented. One field may be an allied field and is individually arranged. Detailed descriptions of fields are available upon request. Field examinations are given once each semester.

Language and Statistics Requirements. For the M.A., students are required to pass an examination in one modern foreign language and demonstrate a working knowledge of descriptive and inferential statistics. For the Ph.D., students are required to demonstrate a reading knowledge of one modern foreign language and competence in statistics. The statistics requirement for both degrees may be satisfied by passing the course *Foundations of Research* at a satisfactory level or by demonstrating equivalent competencies. Language skills will be tested by the examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

Program and Examination for the M.A. Candidates will normally offer three units of graduate work in Education and Child Development, although one of the three may be taken in an allied field. A paper embodying the results of independent research is required. The Final Examination consists of two three-hour written examinations, one in each field offered, and a one-hour oral examination on the M.A. paper.

Examinations for the Ph.D. The Preliminary Examinations consist of four-hour written examinations in each of the fields offered and an oral examination. The Final Examination is an oral examination devoted to the dissertation and the field in which it has been written.

General Degree Requirements for the M.A. and the Ph.D. See page 18.

The Phebe Anna Thorne School and the Child Study Institute. The Phebe Anna Thorne School is maintained by the Department as a laboratory nursery school for normal children where students may observe and assist in the program for three- and four-year-olds. For those preparing for teaching, medical work with children, child welfare or guidance, the school provides opportunity for direct experience with early childhood development. Stu-

dents preparing for early childhood education spend substantial blocks of time in the Thorne School.

The Department also operates at the College the Child Study Institute, a mental health center where problems of learning and behavior are studied and remedial measures planned and carried out with parents and children. The service is given by a staff of qualified specialists in child psychiatry, psychology, school counseling, and remedial teaching. Advanced students participate at various levels of responsibility. Referrals from the schools, from physicians, social agencies, and families give students the opportunity for acquaintance with a diversity of clinical material.

A separate building on the college grounds houses the Department, the Thorne School, and the Institute, with rooms equipped for nursery school teaching and for individual examination of pupils, remedial teaching, individual and group therapy, and student observation.

SEMINARS

The seminars offered are selected from the following. (In most cases, laboratory practice is required.) Some seminars are offered in alternate years; some are offered on demand.

Miss Hoopes

Clinical Evaluation

Advanced Theory and Practice in Clinical Evaluation

Mrs. Maw

Foundations of Research

Educational Psychology

Miss Maxfield

Early Childhood Education

Advanced Theory in Practice in Early Childhood Education

Mrs. Pepitone

Social Theories

Advanced Social Psychology

Social Issues in Education

Family Theory

History and Philosophy of American Education

History and Philosophy of Western Education

Development of Cooperation and Competition

Mr. Wozniak

Life-Span Developmental Processes
Advanced Developmental Theory
Study of Human Development in Historical Perspective
Cognitive Disorders

Instructor to be announced

Principles and Organization of Guidance Programs
Counseling Process: Theory and Practice
Group Process in Counseling and Guidance
Advanced Theory and Practice in Counseling Psychology
Social and Emotional Disorders

SELECTED UNDERGRADUATE COURSES

- 206a *Developmental Psychology*: Mr. Wozniak
207b *Adolescent Development*
301a *Principles of Teaching in the Secondary School*: Mrs. Maw

Principles of Teaching in the Secondary School satisfies the student-teaching requirement of most states. Plans for registration should be made with Mrs. Maw in the spring before the student expects to take the course in the fall.

English

Professor: Robert B. Burlin, Ph.D.

Associate Professors: Carol L. Bernstein, Ph.D.
Sandra M. Berwind, Ph.D., *Chairman*
Thomas H. Jackson, Ph.D.
Joseph E. Kramer, Ph.D.

Assistant Professors: Peter M. Briggs, Ph.D.
Katrín Ristkok Burlin, Ph.D.
Susan Dean, Ph.D.
E. Jane Hedley, Ph.D.
Eileen T. Johnston, Ph.D.
Annette Niemtzw, Ph.D.

Lecturer: Christopher Kendrick, A.B.

Prerequisites. An undergraduate major in English or its equivalent. Applicants should have had some training in at least one

other discipline complementary to the study of literature in the English language. All applicants should submit scores in the Aptitude Test of the Graduate Record Examinations and a sample of recent critical writing. Personal interviews, while not required for admission, are encouraged.

Language Requirements. It is hoped that language skills will enrich the student's work in seminars and courses. For the M.A. degree, a knowledge of either French or German adequate to the reading of scholarly and literary texts is required. For the Ph.D., the student must either pass examinations in both French and German or demonstrate superior competence in one by satisfactorily completing one unit of graduate work in that language or its literature at Bryn Mawr College. (In special cases, with the approval of the appropriate language department and the Department of English, equivalent work at another university may be accepted.) Students working toward the doctorate are also required to have formal training in Latin or Greek. The doctoral candidate should satisfy these requirements by the beginning of the second year of graduate study; they must be satisfied before the candidate will be admitted to the Preliminary Examinations.

With the approval of the English Department, another modern language may be substituted for French or German when it can be shown to be pertinent to a projected dissertation.

Modern foreign language skills will be tested by examinations administered by Bryn Mawr College. The student also has the option of offering scores of the GSFLT. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr College.

Program and Examination for the M.A. Three units of work in English or two in English and one in an allied field. A long paper written under the supervision of a faculty member is required. The Final Examination is written, four hours in length, and on the general field of the M.A. paper.

Program and Examinations for the Ph.D. Work of the Department is carried on primarily through small seminars, supplemented by selected advanced undergraduate courses in which the special needs of graduate students are met, and, for advanced students, supervised units of independent study. Six units of graduate work are required, one of which may be in an allied field. Candidates must spend at least one year in full-time graduate work. The program must include some training in Old or Middle English or in the history of the English language.

After being accepted for doctoral candidacy, the student will take Preliminary Examinations in five parts: four written (four

hours each) and one oral (one or two hours). One written examination may be in an allied field. The choice of the four fields will be determined by the student in consultation with the graduate adviser and the departmental examiners, who will form the Supervising Committee. The candidate is expected to demonstrate a balanced knowledge of different periods.

Before proceeding with the dissertation the doctoral candidate will submit a prospectus to be discussed with the departmental members of the Supervising Committee. The Final Examination is devoted to the dissertation and the field in which it has been written.

Teaching Preparation. The Department offers an apprenticeship program in teaching available to students who have advanced beyond the M.A.

General Degree Requirements for the M.A. and the Ph.D. See page 18.

SEMINARS

Seminars run for one semester. Over a two-year period, opportunity will be offered for seminar study in each of the following fields of English and American Literature.

Medieval Literature: Mr. Burlin

Literature of the Sixteenth Century: Mrs. Hedley

Shakespeare and Renaissance Drama: Mr. Kramer

Literature of the Seventeenth Century: Mr. Kendrick

Restoration and Eighteenth-Century Literature: Mr. Briggs

Fiction: Mrs. Burlin

Nineteenth-Century English Literature: Mrs. Bernstein

Mrs. Johnston

Twentieth-Century Literature: Mrs. Berwind

Mr. Jackson

American Literature: Mrs. Dean

Miss Niemtzow

ADVANCED UNDERGRADUATE COURSES OPEN TO GRADUATE STUDENTS:

300 *Old English Literature:* Mr. Burlin

301 *Readings in Middle English Literature:* Mr. Burlin

315 *Sixteenth-Century Chivalric Romance:* Mrs. Hedley

323 *Forms of Renaissance Tragedy:* Mr. Kramer

325 *Shakespearean Topics:* Mr. Kramer

- 326 *Theater of Ben Jonson*: Mr. Kramer
- 333 *The Metaphysical Poets: Donne to Marvell*: Mrs. Hedley
- 340 *Samuel Johnson and His Circle*: Mr. Briggs
- 352 *Romanticism and Interpretation*: Mrs. Bernstein
- 355 *Major Victorian Poets*: Mrs. Johnston
- 356 *Victorian Literature and the Religious Experience*:
Mrs. Johnston
- 358 *"Women of Talents"*: Mrs. Burlin
- 363 *Walt Whitman and American Poetry*: Mrs. Dean
- 365a *American Autobiography*: Miss Niemtzow
- 365b *The American Dream*: Miss Niemtżów
- 366 *Herman Melville*: Miss Niemtzow
- 371 *The Development of Modern Poetry*: Mr. Jackson
- 375 *W. B. Yeats and Wallace Stevens*: Mrs. Berwind
- 376 *Beckett and Lawrence*: Mr. Jackson
- 383 *The Novel and Society*: Mrs. Bernstein
- 384 *Theories of Fiction*: Mrs. Bernstein
- 385 *Problems in Satire*: Mr. Briggs
- 386 *Milton and English Literary Tradition*: Mr. Briggs
- 387 *Language of Drama*: Mr. Burlin
- 388 *Modern Poetic Theory*: Mr. Jackson
- 389 *Studies in Twentieth-Century Criticism*: Mr. Jackson

French

Professors: Michel Guggenheim, Ph.D.
 Pauline Jones, Ph.D.
 Catherine Lafarge, Ph.D., *Chairman*
 Mario Maurin, Ph.D.

Assistant Professors: Ullrich Langer, Ph.D.
 Margaret Simpson Maurin, Ph.D.
 Grace Armstrong Savage, Ph.D.

Prerequisites: An undergraduate major in French, based on study in school and at least three years of college French, including some advanced work in literature, with evidence of ability to present reports and carry on discussion in French. Training in Latin corresponding to at least two years' study in school is advisable.

Applicants should submit scores in the Aptitude Test and Advanced Test of the Graduate Record Examinations taken within two years of the date on which they wish to begin graduate

studies at Bryn Mawr. Candidates are required to support their application by at least one essay written in French for an advanced undergraduate course or graduate seminar previously taken, as well as by an essay written in English. They are strongly urged to arrange for a personal interview with a member of the Department.

Major and Allied Subjects. Students specialize in French literature from the Middle Ages to the present. Successful completion of a course in Old French philology and Medieval French literature is required of Ph.D. candidates. In special cases and with the consent of the Department, one of the following may be accepted as an allied subject: any literature, ancient or modern; comparative philology; European history; Philosophy; History of Art.

Language Requirements. For the M.A. degree, one Romance language other than French, or German, or evidence of extensive training in Medieval or advanced Latin. For the Ph.D. degree, either a reading knowledge of two modern languages (including one Romance language other than French) or superior competence in one. Students may satisfy the latter requirement by completing satisfactorily at least one unit of graduate work at Bryn Mawr in a Romance literature other than French, or in German literature. Language requirements must be fulfilled before the doctoral candidate takes the Preliminary Examinations.

Language skills will be tested by examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

Program and Examination for the M.A. Candidates will offer two units of graduate work in French and a third unit in either French or an allied field. An M.A. paper on a topic related to the work in one of the seminars is required. The Final Examination consists of a three-hour written examination and a one-hour oral examination, both in French.

Admission to Candidacy for the Ph.D. After completing three full units of graduate work at Bryn Mawr, students are required to pass a qualifying examination before admission to doctoral candidacy. The paper and Final Examination required for the completion of the Bryn Mawr M.A. program may be substituted for the qualifying examination.

Program and Examinations for the Ph.D. Candidates will offer six units of graduate work, one of which may be in an allied field. Suitable related fields should be discussed with the department concerned and with the Department of French.

Students are encouraged to study and do research abroad whenever appropriate and feasible. Opportunities for summer study are provided by the graduate courses given at the Bryn Mawr *Institut d'Etudes Françaises d'Avignon*.

The Preliminary Examinations consist of four papers written in French and an oral examination. The Final Examination is oral and is devoted to the dissertation and the field in which it has been written.

General Degree Requirements for the M.A. and the Ph.D. See page 18.

SEMINARS AND GRADUATE COURSES

An introductory course in Old French philology and Medieval French literature is offered every two years. Students wishing further work in this field may register for a unit of supervised work at Bryn Mawr or attend graduate courses at the University of Pennsylvania. Graduate seminars in selected fields of French literature are given each year, so arranged that the same one will not be given in successive years. The seminars, conducted in French, are selected from the following:

Mr. Guggenheim

Rousseau et le préromantisme

Voltaire

Techniques narratives du XIX^e et XX^e siècles (Semester II)

Précieux, mondains et moralistes du XVII^e siècle

Miss Jones

Vigny et Camus

Verlaine, Rimbaud (Semester I)

Mallarmé

Baudelaire

Miss Lafarge

Stendhal et Flaubert

Le Thème de la prison au XIX^e siècle

Marivaux, Giraudoux

Diderot (Semester I)

Le Roman du XVIII^e siècle

Mr. Langer

Le Baroque en France

Epopées françaises et italiennes du XVI^e siècle

Poésie lyrique de la Pléiade

Montaigne et Pascal (Semester II)

Mr. Maurin

Essayistes du XX^e siècle

L'Autobiographie de Chateaubriand à Sartre

Réalisme et naturalisme

Valéry, Claudel, Proust, Gide

Romancières du XX^e siècle

Mauriac et Sartre

Le Théâtre moderne

Mrs. Maurin

La Littérature fantastique en France

Le Surréalisme

Mrs. Savage

*L'Art du conte et de la nouvelle des Cent Nouvelles Nouvelles
à Flaubert*

Philologie et littérature médiévales

Le Théâtre médiéval

SELECTED UNDERGRADUATE COURSES

301b *Poésie maniériste et baroque*

302a *Voix médiévales et échos modernes*

303b *La Vision de la femme dans la littérature française*

304b *Essayistes du XX^e siècle: Mr. Maurin*

305 *Le Roman du XVIII^e siècle: Miss Lafarge*

306a *Autobiographies de Chateaubriand à Sartre*

307a *Ecrivains engagés de Montaigne à Sartre: Mr. Guggenheim*

308a *Verlaine, Rimbaud*

309a *Gide et Sartre*

310a *Techniques narratives*

312 *La Littérature fantastique en France: Mrs. Maurin*

Courses offered at the *Institut d'Etudes Françaises d'Avignon*:

Molière or Racine

Les Fleurs du mal or Rimbaud

Le Surréalisme

Travaux de traduction et de stylistique

Preparatory course for degree candidates in other departments:

Reading French. This course, which does not carry academic

credit, is designed to assist students in meeting the language requirements for advanced degrees in fields other than French. An extra charge will be made. Specific information may be obtained from the Graduate School of Arts and Sciences during registration.

Geology

Professors: Maria Luisa B. Crawford, Ph.D.
William A. Crawford, Ph.D.
Lucian B. Platt, Ph.D.

Associate Professor: W. Bruce Saunders, Ph.D.

Prerequisites. A bachelor's degree in a natural science or Mathematics. Students who have not majored in Geology will be expected to make up deficiencies in their preparation during their first year of graduate study. Applicants must submit scores in the Aptitude Test of the Graduate Record Examinations.

Major and Allied Subjects. Students may specialize in geochemistry, mineralogy-petrology, paleontology-stratigraphy, or regional and structural geology. The allied subject for the Ph.D. may be either another field of Geology or any one of the other natural sciences or Mathematics; other subjects may be accepted in special cases.

Language Requirements. For the M.A. degree, one of the following: Russian, German, or French. Candidates for the Ph.D. degree may offer two foreign languages from the following: Russian, German, or French; or one language from this list and proficiency in digital computation or statistics. This proficiency will be tested by the Department or may be demonstrated by the satisfactory completion of an appropriate course.

Language skills will be tested by examinations administered by Bryn Mawr College.

Program and Examination for the M.A. At least three units of work are required, one of which will consist of a field or laboratory research project under the direction of a member of the faculty. The results of the research project must be reported in a Master's thesis. The student must also pass a Final Examination consisting of a four-hour written and a one-hour oral test.

Program and Examinations for the Ph.D. Candidates will spend a major portion of their time on a research problem; ordinarily, this will involve field mapping and collecting, together with laboratory study. The number of units of course work to be taken will depend on the student's preparation. A set of Preliminary Examinations which test general knowledge in Geology, knowledge in the candidate's special field, and either an allied subject or an additional field in Geology must be passed before the student becomes deeply involved in the research project. A Final Examination follows the completion of the Ph.D. dissertation. This examination is devoted to the dissertation and the field in which it has been written.

Every graduate student in the Department is expected to assist in the work of the Department.

General Degree Requirements for the M.A. and the Ph.D. See page 18.

SEMINARS AND GRADUATE COURSES

Two or three courses or seminars are offered each semester. These are usually chosen so that each is offered once every other year. The specific content of the seminars is determined by the current interests of faculty and students. Students wishing to do so may also attend graduate courses at the University of Pennsylvania under the Reciprocal Plan (see page 15).

Mr. Crawford

Geochemistry and Analytical Techniques

Selected topics in the geochemistry of the earth combined with instruction in wet chemical and instrumental means of silicate analysis.

Igneous Petrology

Selected subjects in the structure, physical chemistry, and origin of igneous rocks. Prerequisite: Geology 303a, *Thermodynamics for Geologists*, or its equivalent.

Mrs. Crawford

Metamorphism

The physical and chemical processes of metamorphism, accompanied by regional studies. Prerequisite: Geology 303a, *Thermodynamics for Geologists*, or its equivalent.

Advanced Mineralogy

The study of selected rock-forming mineral groups accompanied by instruction in optical, chemical, and x-ray techniques.

Mr. Platt

Structural Geology

Modern concepts in structural geology and theories of deformation.

Tectonics

Stratigraphic and structural relations of mountain ranges leading to analysis of their origin.

Mr. Saunders

Paleontology

Study of selected animal groups in geologic time.

Sedimentary Petrology

The constitution and the origin of sedimentary rocks; their source, transportation, and deposition.

SELECTED UNDERGRADUATE COURSES

- 302b *Advanced Paleontology*: Mr. Saunders
- 303a *Thermodynamics for Geologists*: Mr. Crawford
- 304 *Petrology*: Mr. Crawford, Mrs. Crawford, Mr. Saunders
- 305b *X-Ray Crystallography*: Mrs. Crawford
- 308 *Geochemistry*: Mr. Crawford

German

Professor: Hans Bänziger, Ph.D.

Nancy C. Dorian, Ph.D.

Associate Professors: Gloria Flaherty, Ph.D.

C. Stephen Jaeger, Ph.D., *Chairman*

Assistant Professor: Susan Joan Erickson, Ph.D.

Prerequisites. An undergraduate major or minor in German or an equivalent preparation. All applicants are requested to submit scores in the Aptitude Test and Advanced German Test of the Graduate Record Examinations. They are also encouraged to write to the Chairman and seek a personal interview with the members of the Department whenever possible.

Major and Allied Subjects. Students may specialize in either German literature, German philology, or German linguistics. One of

these fields or an area in humanities, especially the literatures, may serve as the allied subject. Graduate students can acquaint themselves with the theory and practice of teaching German by close cooperation with a member of the faculty.

Language Requirements. Normally French for the M.A.; French and another language, preferably Latin, for the Ph.D. With the approval of the Department, the satisfactory completion of a graduate seminar at Bryn Mawr in a foreign literature other than German may be offered for one language requirement. In special cases, with the approval of the appropriate language department and of the Department of German, equivalent work at another university may be accepted.

Language skills will be tested by examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

All graduate students are required to complete the Bryn Mawr M.A. Should a student have an M.A. in German from another institution, she or he will be expected to take a four-hour qualifying examination in German literature or Germanic philology or both after one full year of study and before proceeding to complete the remaining units in preparation for the Ph.D. Preliminary Examinations.

Program and Examination for the M.A. The program consists of three units in German literature and/or philology, or in German literature and philology and an allied field. In addition to providing familiarity with the field in general, the M.A. program is designed to introduce the student to various historical and critical approaches to the study of literature and language. Each student must demonstrate competence in spoken and written German. After completion of course work, each student must submit a Master's paper to the department clearly demonstrating independent research. The final examination, covering the student's general knowledge of the history of German literature, consists of a three-hour written examination and an oral examination of one hour.

Program and Examinations for the Ph.D. Every candidate must fulfill certain requirements in German literature and Germanic philology. Those majoring in Germanic philology take a minimum of one unit in German literature and will select the following courses: history of the German language, Gothic, Old High German, Middle High German, structural linguistics, and either Old English or Old Norse. Those majoring in German literature will take a minimum of one unit in Germanic philology and will nor-

mally take one unit each in the medieval, classical, and modern periods, as well as at least one genre course. The German Department encourages its students to participate in seminars given by other departments. It encourages its students to study abroad. The Anna Ottendorfer Memorial Research Fellowship for study at a German university is available for women students. Graduate students in German at Bryn Mawr may register for one course each semester at the University of Pennsylvania, or for one course in the area of Medieval Studies at Princeton. The Preliminary Examinations consist of four written tests, one of which must be taken in an allied field, and an oral examination. The Final Examination is devoted to the dissertation and the field in which it has been written.

General Degree Requirements for the M.A. and the Ph.D. See page 18.

SEMINARS

Mr. Bänziger

Brecht and Dürrenmatt

Franz Kafka

Gottfried Keller and German Realism (1981-82)

Hofmannsthal and Rilke

Thomas Mann and Max Frisch

Miss Dorian

Comparative Germanic Grammar (on demand)

Old High German (on demand)

Miss Erickson

Robert Musil

The Romantic Novel

Goethe's Novels (1981-82)

Miss Flaherty

Bibliography and Methods in Criticism (1982-83)

German Baroque Literature

Goethe and Schiller

Romanticism

Mr. Jaeger

Wolfram's Parzival

Rilke (1981-82)

Hartmann von Aue (1981-82)

SELECTED UNDERGRADUATE COURSES

- 300b *A Survey of German Literature*: Mr. Bänziger (1981-82)
301a *History of the German Language*: Miss Dorian (1981-82)
302a *Vernacular Literature in Medieval German*: Mr. Jaeger
(1982-83)
303a *Modern German Prose*: Mr. Bänziger
304b *The German "Novelle"*: Miss Erickson (1981-82)
305b *The Modern German Drama*: Mr. Bänziger
307b *The Literature of the Renaissance and the Reformation*:
Mr. Jaeger
308a *Introduction to Middle High German*: Mr. Jaeger
309a *History of German Theater*: Miss Flaherty
310b *Lessing and the Enlightenment*: Miss Flaherty (1981-82)
315a *Language Learning and Teaching*: Miss Dorian
(INT.)

Greek

Professor: Mabel L. Lang, Ph.D., *Chairman*

Associate Professors: Gregory W. Dickerson, Ph.D.
Richard Hamilton, Ph.D.

Mary Flexner Lecturer: Gregory Nagy, Ph.D. (Semester I, 1982-83)

Prerequisites. An undergraduate major or minor in Greek, based on at least four years of college Greek, or the equivalent, with representative reading from Greek literature and history which, in the opinion of the Department, provides an adequate basis for graduate work. It is expected that all graduate students in Greek will have some knowledge of Latin. Candidates for the Ph.D. degree must first complete an M.A. degree.

Allied Subjects. Any literature, ancient or modern, ancient history, ancient philosophy, Classical Archaeology, linguistics.

Language Requirements. Latin, French, and German for both the M.A. and the Ph.D. Language skills will be tested by examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

Program and Examination for the M.A. The program consists of two units of graduate work in Greek and a third unit in an allied field. Before admission to the Final Examination candidates must pass

an examination in Greek sight translation and complete the M.A. paper. The Final Examination consists of a three-hour written examination on two of the fields covered by the student's seminars and an oral examination of one hour on the field of the paper.

Program and Examinations for the Ph.D. Before admission to the Preliminary Examinations candidates must pass a rigorous examination in Greek sight translation. The Preliminary Examinations consist of four written papers, one of which shall be an allied subject, and an oral examination. The fields from which the three major papers may be selected include: epic poetry (with emphasis on Homer), lyric poetry (with emphasis on Pindar), tragedy, comedy, the orators, the historians, the Pre-Socratics, Plato, Hellenistic poetry, and various periods of Greek history. The Final Examination is devoted to the dissertation and the field in which it has been written.

General Degree Requirements for the M.A. and the Ph.D. See page 18.

SEMINARS AND GRADUATE COURSES

Mr. Dickerson

Aeschylus' Oresteia (Semester I, 1981-82)

Sophocles (Semester II, 1982-83)

Mr. Hamilton

Pindar (Semester II, 1981-82)

Greek Lyric Poetry (Semester I, 1982-83)

Miss Lang

Thucydides (Semesters I and II, 1981-82)

Herodotus (Semesters I and II, 1982-83)

SELECTED UNDERGRADUATE COURSES

The following undergraduate courses are open to graduate students in other fields.

101 *Herodotus and Tragedy*: Mr. Dickerson, Mr. Hamilton

102b *Homer's Odyssey*: Mr. Dickerson

201 *Plato and Thucydides; Tragedy*:
Mr. Hamilton, Mr. Dickerson

251 *Philosophical Readings*: Mr. Hamilton

302 *Aeschylus and Aristophanes; Hesiod and Pindar*:
Mr. Dickerson, Mr. Hamilton

History

Professors: Charles M. Brand, Ph.D.

Arthur P. Dudden, Ph.D., *Chairman*

Mary Maples Dunn, Ph.D., *Academic Deputy to the
President and Dean of the Undergraduate College*

Barbara M. Lane, Ph.D.

J.H.M. Salmon, Lit. D.

Alain Silvera, Ph.D.

James Tanis, Th.D., *Director of Libraries*

Associate Professor: Phyllis S. Lachs, Ph.D.

Assistant Professors: Wendell Holbrook, Ph.D.

Allan Kulikoff, Ph.D.

Dean of the Graduate School of Arts and Sciences:

Barbara McLaughlin Kreutz, Ph.D.

Fields of Study. Master's and doctoral programs develop from seminars and courses available. Research for theses and dissertations grows out of seminars and units offered by the History Department and those allied with it.

Prerequisites. A thorough undergraduate preparation in History, the humanities, and the social sciences. Students who wish to work in ancient or medieval fields must be able to read the essential ancient languages. Those planning work in modern European history or American history must have a reading knowledge of one modern language, preferably French or German, upon entrance. Those planning doctoral programs should have two languages upon entrance or acquire the second language at once. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr. Applicants must submit scores in the Aptitude Test of the Graduate Record Examinations, and a sample of recent historical writing.

Language Requirements. At least one modern foreign language, to be approved by the Department, is required of M.A. degree candidates. The College language examination or the GSFLT must be attempted before the end of the first semester's work; the examination must be passed before the end of the following summer or before candidacy for the degree is requested, whichever is earlier.

At least two modern foreign languages, the choice of which must be approved by the Department during the student's first academic year, are required of the Ph.D. candidates. Students

entering with an A.B. must attempt a College language examination or the GSFLT before the end of the first semester's work and must pass the examination in one language before they may enter upon a third semester of work. They must attempt an examination in the second language no later than their third semester of work and must pass an examination on this second language before they may enter upon a fifth semester of work. Students entering with an M.A. must attempt examinations in both languages before the end of their first semester and must pass examinations in both before they may enter upon a third semester of work. The time limit for part-time students is determined by the academic year, not by the number of units completed. Candidates for the Ph.D. in ancient or medieval history must also demonstrate ability to read one classical language. Directors of research may also require demonstration of ability in special techniques.

In practice, since the College language examinations are scheduled toward the beginning of the second semester, proof of language facility must often be established early in the second semester of work to enable the student to enter upon a third semester of work. In addition, since financial aid decisions are made early in Semester II, often before Semester II language examinations are completed, students applying for financial aid for the succeeding academic year should demonstrate language competence before the end of Semester I.

Program and Examination for the M.A. The program consists of three units of work in History or in History and an allied field, together with a thesis and a final examination. The Final Examination is written and is usually four hours in length.

Program and Examinations for the Ph.D. All students are expected at some time to take a seminar or course in which aspects of historiography and historical method are studied. The Preliminary Examinations test the student's competence in four fields of History or in three fields of History and one field in an allied subject. For example, allied work in medieval literature, art, or philosophy is usually recommended to students of medieval history, and one of these may be offered in the Preliminary Examinations.

The Preliminary Examination may, at the student's choice, consist of a four-hour written exercise in one field followed by a two and one-half hour oral interrogation on three fields, or four-hour written exercises in each of the student's four fields followed by a comparatively brief oral interrogation covering all four fields.

The field of the projected dissertation will be included in the Preliminary Examinations.

Students whose dissertations are in American history will be required to take at least two fields in modern European history. Students specializing in modern European history must offer at least two fields of medieval history for examination. The Final Oral Examination is devoted to the dissertation and the field in which it has been written; plans for publication will also be reviewed. The department reviews each student's progress and plans for work at all stages.

General Degree Requirements for the M.A. and the Ph.D. See page 18.

SEMINARS AND GRADUATE COURSES

The seminars are arranged to allow the fullest possible choice for students over a two- or three-year period of study. Normally the same seminar will not meet two years in succession. Topics listed below indicate the areas in which seminars will be offered according to the needs of students and the current research interests of the faculty.

Ancient History

Students should consult pages where the offerings of the Departments of Greek and Latin are listed.

Byzantine and Medieval Europe

Mr. Brand

Topics in Medieval History

The Fifth and Sixth Centuries

The Twelfth Century

Venice from the Tenth through the Thirteenth Centuries

Mrs. Kreutz

Medieval Maritime History

Early Medieval Italy

Medieval Exploration and Discovery

Medieval Technology

Early Modern Europe

Mr. Salmon

Early Modern French History

Early Modern European Political Theory

Mr. Tanis

The Reformed Reformation in Northern Europe
Selected Topics in Sixteenth- and Seventeenth-Century Dutch
History

Modern European History

Mrs. Lane

Modern Germany: National Socialism; Bauhaus
Topics in the History of Twentieth-Century Europe

Mr. Silvera

Europe and the Near East
Topics in Modern European History

American and British History

Mr. Dudden

The New Deal and The Great Society
Popular Culture Studies

Mrs. Dunn

Seventeenth-Century America
Eighteenth-Century America

Mrs. Lachs

Topics in English History

Mr. Kulikoff

Topics in American Social History

Mr. Tanis

Puritanism and the Great Awakening

Methodology and Historiography

Mr. Krausz

Philosophy of History — offered in the Department of Philosophy

Mr. Salmon

Early Modern European Historiography
Political Ideas and Institutional History (particular emphasis on
 France)

Mr. Tanis

Historiography of the Reformation

African and Afro-American History

Mr. Holbrook

Modern African History
Afro-American History

SELECTED UNDERGRADUATE COURSES

300-level courses may, with additional work, be offered for graduate credit.

- 303 *Topics in the Recent History of the United States*: Mr. Dudden
- 305a *The Italian City-State in the Renaissance*: Mrs. Lane
- 307b *Medieval Cities: Islamic, Byzantine, and Western*: Mr. Brand
- 308a *The Jews in the Middle Ages*: Mr. Brand
- 310 *Societies and Politics of North America*: Mr. Dudden
- 315a *Victorian and Edwardian Britain*: Mrs. Lachs
- 316 *Anglo-American Legal Institutions*: Mrs. Lachs
- 317a *Mexico: Independence to the Present*: Mrs. Dunn
- 320a *The Rise of the Dutch Republic*: Mr. Tanis
- 320b *The Golden Age of the Netherlands*: Mr. Tanis
- 322 *Religious Forces in Colonial America*: Mr. Tanis
- 324 *Topics in Revolutionary Europe, 1789-1848*: Mr. Silvera
- 328a *Colonial Towns in North and South America*: Mrs. Dunn
- 329 *Communities & Communitarianism in American History*:
Mr. Kulikoff
- 330 *France since 1870*: Mr. Silvera
- 332 *The Civil War and Reconstruction*: Mr. Holbrook
- 335a *West African Leadership*: Mr. Holbrook
- 335b *A History of Blacks in the American City*: Mr. Holbrook
- 362 *France, 1559-1661*: Mr. Salmon
- 370b *The Great Powers and the Middle East*: Mr. Silvera

History of Art

Professor: James Snyder, M.F.A., Ph.D.

Professor of Classical and Near Eastern Archaeology and of History of Art: Phyllis Pray Bober, Ph.D.

Associate Professors: David Cast, Ph.D.

Dale Kinney, Ph.D., *Chairman*

Steven Z. Levine, Ph.D.

NOTE: One additional full-time appointment, probably in the field of Baroque art, will be made for 1982-83.

Field of Study. The history of Western art from early Christian to modern times.

Prerequisites. The normal prerequisite for admission is undergraduate training in art history, but students with sound training

in cognate disciplines are occasionally admitted. All applicants must submit scores in the Aptitude Test of the Graduate Record Examinations. For language requirements see below.

Allied Subjects. Archaeology, Classical and Modern Languages, History, and others by arrangement.

Language Requirements. Generally, no student is admitted to the program who does not already command at least one and preferably two of the following languages: French, German, Italian. Students specializing in medieval and Renaissance art must know or learn Latin. All candidates must pass written examinations, devised by the Department, in two foreign languages before they can receive the M.A. or Ph.D. degree. Alternatively candidates may offer scores in the 60th percentile or above on the Graduate School Foreign Language Test (GSFLT) of the Educational Testing Service, if the test is taken while they are enrolled at Bryn Mawr or within 12 months prior to their initial enrollment.

Program and Examination for the M.A. (a) Seminars and supervised independent work totaling three units of graduate credit, subjects to be approved by the Department; certain courses for graduate credit may be taken at the University of Pennsylvania; (b) an M.A. thesis; (c) a written (or written and oral) examination to test the candidate's ability to place the thesis topic in context.

Program and Examinations for the Ph.D. (a) Three units of seminar and supervised independent work above the requirement for the M.A.; (b) preliminary examinations, written and oral, in four discrete fields of western art history (or three fields of art history and one allied subject), topics to be approved by the Department; (c) a dissertation based on original, independent research, that contributes significantly to our knowledge of western art. Research is often conducted abroad. Students working on Italian subjects are encouraged to use the facilities of Bryn Mawr's Villa Massenzia in Rome (see p. 17).

Kress Program. The Department participates in the Samuel H. Kress Foundation Fellowship Program.

SEMINARS AND GRADUATE COURSES

Seminar topics change annually, in accordance with the direction of faculty members' current research. Undergraduate courses at the 300-level offer a somewhat broader perspective, and are open to graduate students as well. Recently offered seminars include:

*"Hellenism" in Byzantine Art
Monuments of Medieval Rome*

Montecassino
Art of the Valois Courts
Late Gothic Painting in Bruges
Geertgen to Sint Jans and the Early
Haarlem School of Painting
Antiquity and the Renaissance
The Tempio Malatestiano at Rimini
Problems in Baroque Painting
Monet and Impressionism
Cezanne
Picasso

TOPICS FOR 1981-82:

Mr. Cast
Palladio and Neo-Palladianism
Mrs. Kinney
Early Christian Ivories
Mr. Snyder
Problems in Early Netherlandish Painting

SELECTED UNDERGRADUATE COURSES

310b *Rome in the Middle Ages*
320a *Dürer*
340a *The Classical Tradition in the Renaissance*
350a *Problems in Impressionist Painting*

History of Religion

Professor: Samuel Tobias Lachs, Ph.D., D.D.

Professor of History: James Tanis, Th.D., *Director of Libraries*
and Professor of History of Religion

A degree program at the graduate level is not offered in History of Religion. For work in this area, students should consult the offerings of the Department of History.

SEMINARS AND GRADUATE COURSES IN HISTORY

Mr. Tanis

The Reformed Reformation in Northern Europe
Puritanism and the Great Awakening
Historiography of the Reformation

SELECTED UNDERGRADUATE COURSES IN HISTORY

The courses below are open to graduate students and, with additional work, may be taken for graduate credit with permission of the major department.

- 210b *Jewish Ethics and Theology*: Mr. Lachs.
 300b *Studies in Early Rabbinic and Medieval Judaism*: Mr. Lachs
 322 *Religious Forces in Colonial America*: Mr. Tanis

Italian

Associate Professors: Nancy Dersofi, Ph.D.

Nicholas Patruno, Ph.D., *Chairman*

No graduate program is offered in Italian. The courses listed below are open to graduate students and, with additional work, may be taken for graduate credit with the permission of the major department.

- 201b *Novel and Poetry of Modern Italy*
 204a *Foscolo, Leopardi and Manzoni*
 204b *Literature of the Nineteenth Century*
 301a *Dante*
 303a *Petrarch, Boccaccio, and the Early Humanists*
 303b *Literature of the Italian Renaissance*
 305a *Arcadia and Enlightenment*
 305b *History of the Italian Theater*

Latin

Professors: Russell T. Scott, Ph.D., *Chairman*
 Myra L. Uhlfelder, Ph.D.

Associate Professor: Julia H. Gaisser, Ph.D.

Prerequisites. An undergraduate major or minor consisting of at least three years of Latin in college. All graduate students in Latin are expected to have begun the study of Greek. Scores in the Aptitude Test of the Graduate Record Examinations should be submitted.

Allied Subjects. The Department recommends as allied subjects: Greek, Classical Archaeology, ancient history, linguistics, or, for students whose special interest is in the medieval period, medieval history or a vernacular literature.

Language Requirements. French and German are required for both the M.A. and Ph.D. Language skills will be tested by examinations administered by Bryn Mawr College. Candidates for advanced degrees must also demonstrate satisfactory competence in Latin composition by examination or course work.

Program and Examination for the M.A. Candidates will normally offer two units of work in Latin and one unit in an allied field. Students will normally complete the work for the degree in one year, but, in cases in which it seems advisable to supplement the student's undergraduate preparation, a second year may be necessary. Candidates must pass a test in Latin sight translation before being admitted to the Final Examination, which consists of a three-hour written and a one-hour oral examination.

Program and Examinations for the Ph.D. Candidates will normally complete a two-year program of four units of work in Latin and two in an allied field. Three of these units may be offered for the M.A. degree, which usually forms part of the doctoral program. Candidates should then undertake a program of independent reading planned to enable them to pass the Preliminary Examinations as soon as possible, after which they will concentrate on the dissertation. In some cases it may be advisable to carry one or two more units of work in the third year. The Preliminary Examinations consist of two four-hour written papers on Latin literature; one four-hour written paper on a special field such as a particular period of Roman history, the works of a special author, Medieval Latin literature, or the history of classical scholarship; one four-hour written paper in the field of the allied subject and a general oral examination. Students whose major interest is in the medieval period will take the two examinations in Latin literature, one in Medieval Latin literature, and a fourth in a field related to the Middle Ages or to the transmission of the classics. Before admission to the Preliminary Examinations, all students must pass tests in sight translation of Latin and Greek. The Final Examination is devoted to the dissertation and the field in which it has been written.

General Degree Requirements for the M.A. and the Ph.D. See page 18.

SEMINARS AND GRADUATE COURSES

Over a period of a few years, seminars will afford the student opportunity to work in specific areas of classical (Republican and Imperial) and medieval literature and civilization. Authors, genres, periods, or special topics dealt with in the seminars will vary according to the needs and desires of graduate students. A balance of prose and poetry, of literature and history, and of earlier and later periods is kept in mind in the establishment of the program.

The following seminars are offered in 1981-83:

1981-82

Mrs. Gaisser

Vergil's Aeneid (Semester II)

Mr. Scott

Roman Satire (Semester I)

Miss Uhlfelder

Literature of Return: Augustine, Boethius, Alain de Lille
(Semesters I and II)

1982-83

Mrs. Gaisser

Roman Didactic Poetry: Lucretius and Vergil
(Semesters I and II)

Mr. Scott

Rhetoric in the Early Empire: Poetry (Semester II)

Miss Uhlfelder

Rhetoric in the Early Empire: Prose (Semester I)

SELECTED UNDERGRADUATE COURSES

202a,b *Medieval Latin Literature:* Miss Uhlfelder

301a *Livy and Tacitus:* Mr. Scott

301b *Vergil's Aeneid:* Mrs. Gaisser

302a *Lucretius:* Miss Uhlfelder

302b *Cicero and Caesar:* Mr. Scott

Mathematics

Professors: Frederic Cunningham, Jr., Ph.D., *Chairman*
Mario Martelli, Ph.D.

Assistant Professor: Rhonda J. Hughes, Ph.D.

Lecturer: Paul Melvin, Ph.D.

Prerequisites. A good undergraduate preparation in Mathematics or in Mathematics and Physics.

Major and Allied Subjects. Students may specialize in any of the broad divisions of Mathematics: algebra, analysis, geometry, or applied mathematics but are expected also to acquire a well-rounded knowledge of the subject as a whole. Certain courses in Physics, Chemistry, or Philosophy (logic) are accepted as allied work.

Language Requirements. Candidates for the M.A. must have a reading knowledge of French, German, or Russian. Candidates for the Ph.D. must pass examinations in two of the three: French, German, Russian.

Language skills will be tested by examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twenty-four months of the date on which they begin graduate work at Bryn Mawr.

Program and Examination for the M.A. The program consists of three units of work in Mathematics, or in Mathematics and an allied field, and an M.A. paper. Advanced undergraduate courses which supplement the student's preparation may under certain conditions be taken for graduate credit. The Final Examination is usually oral and one hour in length.

Program and Examinations for the Ph.D. Candidates will take such courses and seminars as are needed to provide a sufficiently broad foundation. As they progress they will devote an increasing portion of their time to individual study and research under the direction of a member of the Department. The Preliminary Examinations are taken after the student is well advanced and usually consist of three or four written examinations intended to test the candidate's breadth of knowledge and understanding of the structure of Mathematics as a whole. An oral examination is usually included. The Final Examination is oral and is devoted to the candidate's special field and the subject of the dissertation.

General Degree Requirements for the M.A. and the Ph.D. See page 18.

SEMINARS AND GRADUATE COURSES

The work of the graduate program consists primarily of reading and research under the direction of members of the department. Seminars are offered in selected topics as justified to meet the needs and interests of sufficient numbers of students. Students are also encouraged to take advantage of the reciprocity agreement to take a course at the University of Pennsylvania.

Mr. Cunningham

Real and Complex Analysis

Functional Analysis

General Topology

Linear Spaces

Harmonic Analysis

Mrs. Hughes

Real and Complex Analysis

Measure Theory

Banach Algebras

Linear Operators

Mathematics of Quantum Physics

Mr. Martelli

Real and Complex Analysis

Differential Equations

Dynamical Systems

Applied Mathematics

Non-linear Functional Analysis

Mr. Melvin

Differential Topology

Algebraic Topology

Topology of Manifolds

Transformation Groups

Knot Theory

SELECTED UNDERGRADUATE COURSES

- 301 *Advanced Calculus*
- 303a *Introduction to Abstract Algebra*
- 303b *Topics in Algebra*
- 308 *Introduction to Applied Mathematics*
- 309b *Dynamical Systems*
- 310 *Theory of Functions of a Complex Variable*
- 311 *Differential Equations*
- 312 *Topology*
- 320 *Real Analysis*

Music

Professor: Isabelle Cazeaux, Ph.D., Chairman

Applications are no longer being accepted for graduate study leading to a degree in Music. Graduate seminars and approved courses may be taken for graduate credit with the permission of the major department.

SEMINAR AND GRADUATE COURSE

Miss Cazeaux

Subject to be announced

SELECTED UNDERGRADUATE COURSES

Undergraduate courses taken for graduate credit require additional work.

302 *Medieval, Renaissance and Baroque Music:* Miss Cazeaux

306b *Opera and Music Drama:* Miss Cazeaux

307a *Music Criticism:* Miss Cazeaux

310a *Bibliography and Research:* Miss Cazeaux

Philosophy

Professors: George L. Kline, Ph.D., Chairman
Jean A. Potter, Ph.D.

Associate Professors: Michael Krausz, Ph.D.
George E. Weaver, Jr., Ph.D.

Assistant Professors: Robert J. Dostal, Ph.D.
Richard H. Gaskins, Ph.D., J.D., Acting Dean
of the Graduate School of Social Work and Social
Research

Professor of Political Science: Stephen G. Salkever, Ph.D.

Visiting Lecturers: Richard J. Bernstein, Ph.D., Haverford College,
Semester II, 1981-82#
Hugh M. Lacey, Ph.D., Swarthmore College,
Semester I, 1981-82#

Under a faculty exchange program with Swarthmore and Haverford Colleges

Prerequisites. In general, an undergraduate major in Philosophy. Students whose undergraduate training does not include a major in Philosophy may be required to take such undergraduate courses as the Department considers necessary. All applicants are required to submit scores in the Aptitude Test of the Graduate Record Examinations.

Allied Subjects. Subjects in most fields of the humanities, mathematics, and natural and social sciences.

Language Requirements. One modern language for the M.A., French and German for the Ph.D. At the discretion of the Department, another language may be substituted for French or German when the student's research requires it.

Language proficiency will be tested by examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

Program and Examinations for the M.A. Three units of work in Philosophy or in Philosophy and an allied field. The Final Examination is usually written and four hours in length.

Program and Examinations for the Ph.D. All students must demonstrate competence in logic before receiving the Ph.D. This requirement may be met in several ways: by successful completion, before admission to candidacy, of an intermediate course or graduate seminar in logic; or by special examination before admission to candidacy; or by passing a preliminary examination in the systematic field of logic. The Preliminary Examination will consist of four written examinations, two of which are to be in systematic fields and two in authors or periods.

General Degree Requirements for the M.A. and Ph.D. See page 18.

Graduate Philosophy Colloquium. Graduate students are encouraged to participate in the monthly meetings of the Graduate Philosophy Colloquium. Papers are read by faculty and students of Bryn Mawr as well as visiting lecturers. In addition, both the Fullerton Club and the Philadelphia Logic Colloquium hold their monthly meetings at Bryn Mawr and the graduate students are invited to attend.

SEMINARS

All seminars run through the entire year except those identified as being offered in a given semester. The choice of seminars to be offered in a particular year depends in part on the interests of the students.

Mr. Dostal

Phenomenology: Husserl

Kant: Critique of Pure Reason and Critique of Judgment

Heidegger

Hermeneutics

Mr. Kline

Ethics

Hegel: Phenomenology of Spirit and Philosophy of Right

Whitehead

Mr. Krausz

Aesthetics

Philosophy of History (Semester I, 1981-82)

Philosophy of Science

Epistemology

Miss Potter

Continental Rationalism (1981-82)

Medieval Philosophy

Philosophy of Religion

History of Philosophic Concepts

Mr. Salkever

Aristotle

Political Philosophy

Mr. Weaver

Logical Theory

Introduction to Mathematical Logics

Homogeneous Universal Models

Mr. Bernstein

Philosophy of Social Theory (Semester II, 1981-82)

Mr. Lacey

Philosophy of Psychology (Semester I, 1981-82)

SELECTED UNDERGRADUATE COURSES

- 310 *Philosophy of Science*: Mr. Krausz
- 311 *Philosophy of Religion*: Miss Potter
- 312b *Philosophy of History*: Mr. Krausz
- 316a *History and Philosophy of Mathematics*: Mr. Weaver
- 317a *Philosophy of Creativity*: Mr. Krausz
- 318 *Philosophy of Language*: Mr. Weaver
- 322 *The Nature of Legal Reasoning*: Mr. Gaskins
- 330a *Kant: Critique of Pure Reason*: Mr. Dostal
- 331b *Hegel*: Mr. Dostal

333 *Russian Philosophy*: Mr. Kline
 Political Science 320 *Problems in Greek Political
 Philosophy*: Mr. Salkever

Physics

Professors: Rosalie C. Hoyt, Ph.D.
 John R. Pruett, Ph.D.

Associate Professor: Alfonso M. Albano, Ph.D., *Chairman*

Assistant Professors: Neal B. Abraham, Ph.D.
 Peter Beckmann, Ph.D.

Fields of Study and Research. The graduate program is designed to give students a broad background in physics and a high degree of expertise in a chosen field of research. Seminars and original research are tailored to meet individual needs and goals, which can include interdisciplinary studies, teaching, and applied research, as well as pure research in theoretical and experimental physics. In theoretical physics, the present research activities in the department involve non-equilibrium thermodynamics, nuclear and electron spin interactions, solid-solid phase transitions, photon statistics and gas laser theory, and the structure and function of biomembranes and other systems using computer modeling techniques. In experimental physics, present activities include nuclear spin relaxation studies in molecular solids using pulsed nuclear magnetic resonance, high-gain laser amplifiers and studies of amplified spontaneous emission in lasers, and nuclear spectroscopy using directional and polarization correlation techniques. Using the Plan for the Coordination of the Sciences there are special opportunities for research and training in such areas as chemical physics, biophysics, and geophysics. See page 91.

Prerequisites: An undergraduate major in Physics or in a field of study closely allied to Physics (e.g., Mathematics, Chemistry, Engineering). Students who have not majored in Physics will usually find it necessary to take some undergraduate courses before entering graduate courses and seminars. All applicants for admission to graduate work in Physics are requested to submit scores in the Aptitude Test and Advanced Test of the Graduate Record Examinations.

Language Requirements. For both the M.A. and the Ph.D. degrees, one language is required, normally French, German, or Russian. Language skills are tested by examinations administered by Bryn Mawr College.

Computer Skills Requirement. For both the M.A. and the Ph.D. degrees, proficiency is required in the use of a modern computer language approved by the Department. Computer skills are tested by examinations administered by Bryn Mawr College.

Qualifying Examination. An oral qualifying examination must be passed by all graduate students. The subject matter of the examination, which is normally taken in the first semester of graduate work, will include only material ordinarily covered in undergraduate physics courses.

Program and Examinations for the M.A. The qualifying examination discussed above must be taken during the first year. The three units of work offered for the degree must include the quantum mechanics course and will ordinarily include one unit of experimental physics. The paper will usually consist of a report on a special field related to one of the seminars or units of graduate work offered for the M.A. The M.A. Examination is a one-hour oral examination.

Program and Examinations for the Ph.D. Each student is normally expected to have completed the graduate courses in Quantum Mechanics and Electromagnetic Theory, or their equivalents, must have a mathematical preparation acceptable as adequate for the Ph.D. degree, and must have passed the oral qualifying examination described above before being recommended for candidacy.

The Preliminary Examinations are intended to test the candidate's general background and to determine whether it is broad and deep enough to serve as a preparation for original research work in a specialized field. In general, two years of full- or part-time graduate work should prepare the student for these examinations, and candidates for the Ph.D. are urged to submit themselves for examination at this stage of their work. The examinations will consist of three four-hour written examinations, one problem set, and an oral examination lasting approximately one hour. The three four-hour examinations will cover the following fields of Physics: classical mechanics, special relativity, electromagnetic theory, optics, quantum mechanics, atomic physics, molecular physics, solid state physics, nuclear physics, thermodynamics and statistical mechanics. The student devotes approximately twelve hours to direct work on the problem set over a three-day period. Any books, periodicals, notes, etc., may be

used in connection with the problem set. The oral examination is devoted to general Physics.

Unless the candidate has demonstrated adequate acquaintance with experimental physics in other ways, either the research leading to the dissertation must be, at least in part, experimental or the candidate must take a seminar in experimental physics. The Final Examination will be devoted to the dissertation and the field in which it has been written.

General Degree Requirements for the M.A. and Ph.D. See page 18.

Colloquium. All members of the Department, including graduate students, meet weekly for the discussion of current problems.

GRADUATE COURSES

Year long (1 unit) graduate courses in quantum mechanics and electromagnetic theory are offered every year. Although both are normally taken in the first year, one or, if necessary, both may be delayed a year if it is felt that the student requires prior work at the level of advanced undergraduate courses. Students who have taken equivalent graduate courses elsewhere may be exempted.

Quantum Mechanics

Mathematical formalism of matrix and wave mechanics; the Schroedinger, Heisenberg, and Interaction Approaches; time-independent and time-dependent perturbation theory; semi-classical theory of radiation; the density matrix; Dirac's relativistic wave equation.

Electromagnetic Theory

Electrostatics, magnetic fields of constant currents, Maxwell's equations and their applications, electromagnetic fields of time-varying currents and of moving charges and radiation of electromagnetic waves.

SEMINARS

The seminars reflect both the research activities of the faculty and the research interests of the students. As a result, contents are flexible and are chosen to satisfy the needs of individual students and to incorporate recent developments in each field. Seminars may cover either one or two semesters (1/2 or 1 unit). Those listed below are intended only to be representative, offerings in any given year being determined by student needs. Under the Recip-

rocal Plan, students may also take graduate courses at the University of Pennsylvania. See page 15.

Mr. Abraham

Quantum Optics

Laser Physics

Non-linear Phenomena

Mr. Albano

Statistical Mechanics

Non-equilibrium Thermodynamics

Advanced Quantum Mechanics

Mr. Beckmann

Solid State Physics

Magnetic Resonance

Mr. Pruett

Nuclear Physics

Molecular Physics, with applications to biomembrane structure and function

Members of the Department

Experimental Physics

Mathematical Physics

SELECTED ADVANCED UNDERGRADUATE COURSES

308a *Advanced Classical Mechanics*

309b *Advanced Electromagnetic Theory*

310b *Mathematical Physics*

Political Science

The Caroline McCormick Slade Department of Political Science

Professors: Melville T. Kennedy, Jr., Ph.D.

Gertrude C. K. Leighton, A.B., J.D.

Marc Howard Ross, Ph.D., *Chairman*

Stephen G. Salkever, Ph.D.

Associate Professor: Charles E. Frye, Ph.D.

Prerequisites. A good undergraduate training in Political Science

and related subjects. Scores of the Graduate Record Examination Aptitude Test and Advanced Test are required in applications for admission.

Major and Allied Subjects. The major fields offered in Political Science are political philosophy and theory, Western comparative politics, non-Western comparative politics, American political process, political behavior, American constitutional law, and international politics and law. Allied fields may be chosen in the other social sciences, in History and Philosophy, and, with the special permission of the Department, in certain subjects in literature. Candidates for the Ph.D. are expected to prepare themselves in four fields, one of which may be allied.

Language Requirements. One modern foreign language or statistics for the M.A. Two foreign languages (only one need be modern) or one modern language and statistics for the Ph.D. Language skills will be tested by examinations administered by Bryn Mawr College. The statistics requirement may be satisfied by passing an approved course in statistics, or through an examination.

Program and Examination for the M.A. The program consists of three units of work in Political Science, but a unit from an allied field may be substituted for one of these. The Final Examination will be written or oral or both.

Program and Examinations for the Ph.D. Candidates are expected to offer four fields, one of them being the field in which the dissertation is written. These fields are tested by written and oral Preliminary Examinations. An oral Final Examination will be devoted to the dissertation and the field in which it has been written.

General Degree Requirements for the M.A. and the Ph.D. See page 18.

SEMESTER SEMINARS

The following one semester seminars are offered on demand.

Mr. Frye

European Comparative Politics

Intellectuals in Comparative Perspective

Mr. Kennedy

International Politics

Topics in Politics of China, Japan, India

Miss Leighton

Aspects of Political Behavior

International Law

Jurisprudence

Mr. Ross

American Politics: Political Behavior
Community Politics
Public Policy

Mr. Salkever

Aristotle
Political Philosophy

SELECTED UNDERGRADUATE COURSES

- 218b *Conflict and Conflict Resolution*: Mr. Ross
- 221b *International Law*: Miss Leighton
- 230b *Political Behavior*: Mr. Ross
- 301b *Law and Society*: Miss Leighton
- 302b *Law, Policy, and Personality*: Miss Leighton
- 303a *Problems in International Politics*: Mr. Kennedy
- 305b *European Fascism*: Mr. Frye
- 311b *Theory and Practice in Political Philosophy*: Mr. Salkever
- 312b *Problems in Modernization*: Mr. Kennedy
- 313b *Problems in Constitutional Law*: Mr. Salkever
- 315b *Political Authority and Decision Making*: Mr. Ross
- 317a *Political Culture and Political Leadership*: Mr. Frye
- 318b *Urban Political Conflict*: Mr. Ross
- 327a *Political Philosophy in the 20th Century*: Mr. Salkever
- 328a *United States Policy in Asia*: Mr. Kennedy

Psychology

Professors: Richard C. Gonzalez, Ph.D., *Chairman*
Howard S. Hoffman, Ph.D.
Matthew Yarczower, Ph.D.

Associate Professors: Clark McCauley, Jr., Ph.D.
Earl Thomas, Ph.D.

Assistant Professor: Virginia Mann, Ph.D.

Prerequisites. Undergraduate training in Psychology is recommended, but outstanding applicants with training only in related fields may be accepted. Students who have not majored in Psychology as undergraduates may find it necessary to devote a substantial portion of the first year to undergraduate courses. All

applicants must submit scores on the Aptitude Test of the Graduate Record Examinations.

Major and Allied Subjects. The orientation in the various fields is experimental, and there are no facilities for clinical training. Work in Psychology may be coordinated with work in one of the following allied areas: Anthropology, Biology, Chemistry, Mathematics, Philosophy, and Physics.

Language Requirements. Candidates for the M.A. must pass an examination in one of the following languages: French, German, Russian, Spanish. Candidates for the Ph.D. must offer two foreign languages: French and German (or some other foreign language with permission of the Department) or one foreign language and statistics. The statistics requirement will be tested by the Department. Language skills will be tested by the examinations administered by Bryn Mawr College.

Program and Examination for the M.A. The program of work must include three units (six one-semester seminars or courses) which usually will be chosen from the group of seminars and courses listed below. Before final approval of the Master's paper, each candidate must pass a written examination in statistics. The Final Oral Examination, one hour in length, deals with the Master's paper and related topics.

Program and Examinations for the Ph.D. Ph.D. candidates are expected to devote a large portion of their time to supervised research. In the first year, the research is done under the close supervision of the candidate's faculty advisor; a written report of the year's research activities (the form and content of which are determined by the candidate and his advisor) is submitted to the Department, and an oral presentation based on the report is made to the faculty and graduate student members of the Department. In addition to research, candidates, in their first two years of residence, take the six one-semester graduate courses listed below (or if they elect to do so, a written examination in the subject matter instead of any one or all of the courses). The Preliminary Examinations, which should be taken early in the third year, consist of three written area-examinations of four hours each and a paper which either (a) synthesizes a major area of research in psychology or (b) develops a theoretical analysis of a major problem or issue in psychology. The three area-examinations must be completed within four weeks; the entire set of examinations (including the paper) must be completed within six months. The three four-hour examinations are in the following areas: learning and motivation, physiological psychology, social psychology, developmental psychology, or, with the ap-

proval of the Department, in two of these areas and in one of the allied subjects listed above. (The area of comparative psychology as such is not represented in a separate examination; comparative issues are treated in each of the other area-examinations.) The topic of the paper is developed initially by the student and his advisor and submitted to the Department for approval.

General Degree Requirements for the M.A. and the Ph.D. See page 18.

GRADUATE COURSES

- Mr. Gonzalez
Learning Theory
- Mr. Hoffman
Statistics
- Miss Mann
Developmental Psychology
- Mr. McCauley
Experimental-Social Psychology
- Mr. Thomas
Physiological Psychology
- Mr. Yarczower
Comparative Psychology

SEMINARS

Seminars are offered on specialized topics in the areas of experimental, comparative, developmental, physiological, and social psychology. Among those offered most recently are the following: *Communication Theory, Experimental Design, Current Literature in Behavior Theory, Physiological Techniques and Instrumentation, Psychopharmacology, Stimulus Control of Behavior, Aversive Control, Neurophysiology of Reward and Punishment, Comparative Neuroanatomy, Sensory Processes, Psycholinguistics.*

SELECTED UNDERGRADUATE COURSES

- 201a *Learning Theory and Behavior*: Mr. Gonzalez
- 202b *Comparative Psychology*: Mr. Yarczower
- 204a *Sensory Processes*: Mr. Hoffman
- 207b *Psychology of Reading*: Miss Mann
- 302b *Physiological Psychology*: Mr. Thomas
- 303b *Psychopharmacology*: Mr. Thomas

Russian

Associate Professors: Dan E. Davidson, Ph.D., *Chairman*
George S. Pahomov, Ph.D.
Ruth L. Pearce, Ph.D.

Assistant Professor: Sergej Davydov, Ph.D.

Professor of Philosophy: George L. Kline, Ph.D.

Prerequisites. An undergraduate major in Russian or an equivalent preparation with some work in literature. Applicants should submit a brief biography written in Russian, and at least one essay written in English on a literary topic. The English essay may have been written for an advanced undergraduate course or graduate seminar previously taken.

Allied Subjects. Any language or literature, economics, Russian history, Political Science, Russian philosophy.

Language Requirements. For the M.A., French or German. For the Ph.D., French, German, and one Slavic language other than Russian. Language skills will be tested by examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

Program and Examination for the M.A. Three units of work in Russian or in Russian and an allied field. The Final Examination consists of a three-hour written examination and an oral examination of one hour.

Examinations for the Ph.D. The Preliminary Examinations consist of four written papers, one of which must be taken in an allied field, and an oral examination. The Final Examination will be devoted to the dissertation and the field in which it has been written.

Students are encouraged to study and do research abroad whenever appropriate and feasible. Opportunities for graduate study are provided under the terms of exchange agreements between Bryn Mawr College and the Pushkin Institute of the Russian Language in Moscow.

General Degree Requirements for the M.A. and the Ph.D. See page 18.

SEMINARS AND GRADUATE COURSES

Seminars offered each year are selected in accordance with the needs and interests of the students enrolled. Normally the same seminar is not given in two successive years. In cooperation with the Department of Slavic Languages of the University of Pennsylvania, the student may also register at that institution under the Reciprocal Plan (see page 15) for a unit of work chosen from the graduate courses offered in Slavic. Undergraduate 300-level courses, with additional work, may also be offered for graduate credit.

Mr. Davidson

Karamzin and Early Romanticism

Old Russian Literature

Russian Language: Structure and Teaching Methodology

Russian Prose of the Early Modern Period

Versification

Mr. Davydov

Symbolism, Futurism, Acmeism

Poetics of Short Narrative Fiction

Russian Modernism

The Art of Vladimir Nabokov

Mr. Pahomov

Chekhov

Classics of Russian Drama from Fonvizin to Chekhov

Russian Romanticism

The Russian Short Story: Karamzin to Chekhov

Turgenev and Goncharov

Mrs. Pearce

History of the Development of the Russian Literary Language

History of the Russian Language: Phonology and Morphology

Old Church Slavic: Phonology and Morphology

Readings in Old Church Slavic

Studies in the Structure of Russian

Mr. Kline

Theory and Practice of Literary Translation

SELECTED UNDERGRADUATE COURSES

303 *Twentieth-Century Russian Literature*

305 *Advanced Russian Grammar*

306 *Russian Prose and Poetry of the Nineteenth Century*

Philosophy 333 *Russian Philosophy*

Cooperation with the University of Pennsylvania. Attention is drawn to the graduate courses offered by the Department of Slavic Languages at the University of Pennsylvania. Students wishing to do so may register for a unit of work at the University under the Reciprocal Plan (see page 15).

Sociology

Professors: Judith R. Porter, Ph.D.

Eugene V. Schneider, Ph.D., *Chairman*

Associate Professor: Robert E. Washington, Ph.D.

Assistant Professor: Sheila Kishler Bennett, Ph.D.

Prerequisites. An undergraduate preparation in Sociology or some closely related social science is desirable. Students whose undergraduate training is not entirely adequate may be required to take certain undergraduate courses.

Major and Allied Subjects. Students may wish to take some work in related fields: anthropology, economics, psychology, political science, history, and statistics. In addition, courses in sociology and allied subjects may be taken at the University of Pennsylvania under the terms of the Reciprocal Plan (see page 15).

Language and Statistics Requirements. Candidates for the M.A. must offer one modern foreign language and statistics. Candidates for the Ph.D. degree must offer two modern foreign languages (usually French and German) or one modern foreign language and statistics. The statistics requirement will be tested by the Department or may be met by passing a graduate course in statistics.

Language skills will be tested by the examinations administered by Bryn Mawr College. Entering students may offer scores of the Graduate School Foreign Language Test (GSFLT) of the Educational Testing Service taken within twelve months of the date on which they begin graduate work at Bryn Mawr College.

Program and Examination for the M.A. The program consists of three units of work. The Final Examination may consist of one four-hour written paper, or one three-hour written paper and an oral examination of one hour.

Program and Examinations for the Ph.D. The Preliminary Examina-

tions for candidates for the Ph.D. will consist of four three-hour written papers and an oral examination of one hour. These examinations will be in general sociology, sociological theory, and two special fields, one of which may be an allied field. The Final Examination will be devoted to the dissertation and the field in which it has been written.

General Degree Requirements for the M.A. and the Ph.D. See page 18.

SEMINARS

Seminars will be given in special branches of Sociology, such as:

<i>Sociological Theory</i>	<i>Sociology of Poverty</i>
<i>Social Stratification</i>	<i>Political Sociology</i>
<i>Sociology of Religion</i>	<i>Sociology of Developing</i>
<i>Personality and</i>	<i>Countries</i>
<i>Social Structure</i>	<i>Sociology of the Family</i>
<i>Sociology of Knowledge</i>	<i>Social Change</i>
<i>Industrial Sociology</i>	<i>Research Design and</i>
<i>Causal Analysis</i>	<i>Statistical Analysis</i>
<i>Race Relations</i>	<i>Measurement</i>

UNDERGRADUATE COURSES

Under exceptional circumstances a student may be registered for an advanced undergraduate course which with additional work may be accepted for graduate credit.

Spanish

Professors: Joaquín González-Muela, D. en Fil.
Willard F. King, Ph.D., *Chairman*
Eleanor K. Paucker, Ph.D.

Assistant Professor: Enrique Sacerio-Garí, Ph.D.

Andrew W. Mellon Postdoctoral Fellow: Carol Beane, Ph.D.

Prerequisites. An undergraduate major in Spanish (or the equivalent) which includes representative reading from both Spanish-American and peninsular Spanish literature. Applicants for admission in Spanish are asked to submit scores on the Aptitude

Test and Advanced Test of the Graduate Record Examinations. They should submit one essay written in Spanish for an advanced undergraduate course and are strongly advised to arrange for a personal interview with a member of the Department.

Major and Allied Subjects. Students may specialize in any period of Spanish or Spanish-American literature. All Ph.D. candidates must complete one course in the history of the Spanish language. The following allied subjects are accepted: any literature, ancient or modern; European or Spanish-American history; classical or Romance philology; history of art.

Language Requirements. For the M.A., either German or one Romance language other than Spanish. For the Ph.D., German and French; in special cases the Department may accept other languages. The Ph.D. candidate's preparation must give evidence of adequate knowledge of Latin; if it does not, Latin must be included in the graduate program.

Language skills will be tested by examinations administered by Bryn Mawr College. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

Program and Examination for the M.A. The program consists of three units of graduate work in Spanish or two units of graduate work in Spanish and one other in an allied field. An M.A. paper on a topic related to the work in one of the seminars is required. The Final Examination consists of a three-hour written section and an oral of one hour, both in Spanish.

Program and Examinations for the Ph.D. Students must complete a minimum of six units of graduate work, one and one-half of which may be in an allied subject. The Preliminary Examinations consist of four tests written in Spanish on both Spanish and Spanish-American topics and an oral examination. Suitable fields for these examinations should be discussed with the Chairman of the Department. The Final Examination is oral and devoted to the dissertation and the field in which it has been written.

General Degree Requirements for the M.A. and the Ph.D. See page 18.

SEMINARS

The seminars are arranged to allow the widest possible choice for students over a two- or three-year period of study. Normally the same seminar will not be given two years in succession.

Mr. González-Muela

The History of the Spanish Language
The Medieval Castilian Epic and Lyric
Medieval Prose from Alfonso el Sabio to the Corbacho
Popular and Elite Styles in Golden Age Poetry
The Language of Poetry since 1950

Mrs. King

Ideological Currents in Renaissance Spain
Cervantes
The Spanish Novel of the Sixteenth and Seventeenth Centuries
Seventeenth-Century Drama
Modern Drama
Critical Approaches to Literature

Mrs. Paucker

Spanish Romanticism
The Urban Novel in Spain
Unamuno and Machado
The Novel of the Mexican Revolution
Gauche Literature
Stylistics and Advanced Syntactic Analysis

Mr. Sacerio-Garí

Chroniclers of the New World
Borges and His Precursors
The New Latin American Novel
Modern Latin American Poetry

SELECTED UNDERGRADUATE COURSES

- 302a *Medieval Spanish Literature*: Mrs. Paucker
303a *The Modern Novel in Spain*: Mr. González-Muela
303b *Modern Poetry in Spain*: Mr. González-Muela
304a *Cervantes*: Mrs. King
304b *Poetry and Drama of the Golden Age*: Mrs. King
350b *Masters of the Short Story*: Mr. Sacerio-Garí

Appropriate graduate seminars at the *Centro de Estudios Hispánicos en Madrid* may be included in the program for the M.A. or the Ph.D. (see page 16).

Fees

See Appendix B.

Students' Rights and Responsibilities

Equality of Opportunity

Bryn Mawr College admits students of any race, color, national and ethnic origin as well as the handicapped, to all the rights, privileges, programs and activities generally accorded or made available to students at the College. It does not discriminate on the basis of race, color, or national or ethnic origin or handicap in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other College-administered programs or in its employment practices.

To aid the handicapped, regional alumnae/i will provide reading services, orientation sessions, and other services to applicants who make the College aware of their physical disabilities.

As required by Title IX of the 1972 Federal Education Amendments, it is also the policy of Bryn Mawr College not to discriminate on the basis of sex in its educational programs, activities, or employment practices. The admission of women in the Undergraduate College is in conformity with a provision of the Act. Inquiries regarding compliance with Title IX and other policies of non-discrimination may be directed to the Equal Opportunity Officer Joseph S. Johnston, Taylor Hall, or the Director of the Office for Civil Rights, Department of Education, Washington, D.C.

Family Educational Rights and Privacy Act of 1974

The Family Educational Rights and Privacy Act of 1974 was designed to protect the privacy of education records, to establish the right of students to inspect and review their education records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students have the right to file complaints with the Family Educational Rights and Privacy Act Office (FERPA), Department of Education,

5411 Switzer Bldg., 330 C Street, SW, Washington, D.C. 20201, concerning alleged failures by the institution to comply with the Act.

Copies of Bryn Mawr's policy regarding the Act and procedures used by the College to comply with the Act can be found in the Office of the Dean. The policy is printed in the Bryn Mawr-Haverford Academic Regulations, which also list all education records maintained on students by this institution.

Questions concerning the Family Educational Rights and Privacy Act may be referred to the Office of the Graduate Dean.

Designation of Directory Information

Bryn Mawr College hereby designates the following categories of student information as public or "Directory Information." Such information may be disclosed by the institution for any purpose, at its discretion.

- Category I Name, address, dates of attendance, class
- Category II Previous institution(s) attended, major field of study, awards, honors, degree(s) conferred
- Category III Date of birth
- Category IV Telephone number
- Category V Marital Status

Currently enrolled students may withhold disclosure of any category of information under the Family Educational Rights and Privacy Act of 1974 by written notification which must be in the Office of the Recorder, Taylor Hall, by 5 p.m. on the last Friday in September. Forms requesting the withholding of "Directory Information" are available in all Deans' offices and in the Office of the Recorder.

Bryn Mawr College assumes that failure on the part of any student to specifically request the withholding of categories of "Directory Information" indicates individual approval for disclosure.

Exclusion

In the case of unsatisfactory work, or failure to pass the requirements for the M.A. or Ph.D., the department may recommend exclusion of a student to the Dean of the Graduate School of Arts and Sciences, who will notify the student of the decision. If the student wishes to appeal the decision, the Council of the

Graduate School of Arts and Sciences (including the President) will hear the student and the department; the decision of the Council of the Graduate School of Arts and Sciences and the President will be binding.

A student whose behavior disrupts the normal conduct of academic affairs may be excluded by the Dean, in consultation with the student's department. If the student wishes to appeal the decision, a committee constituted of faculty members of the Council of the Graduate School of Arts and Sciences and members of the Graduate Student Council will hear the student, the chairman of the department, and the Dean. The committee will make its recommendations to the President; the President's decision will be binding.

In cases of exclusion, fees will not be refunded or remitted in whole or in part; fellowships, scholarships, and assistantships will be cancelled.

Financial Aid and Merit Awards

Application

Application from citizens of the United States and Canada should be made to the Dean of the Graduate School of Arts and Sciences and must be filed complete not later than February 1. In writing for forms, applicants should state their fields of concentration. Applications from foreign students must be received not later than January 25. Scores of the Test of English as a Foreign Language (TOEFL) or the examination of the English Language Institute of the University of Michigan must be included. These application deadlines apply equally to new and continuing students.

Graduate and Professional School Financial Aid Service

The Graduate School of Arts and Sciences is a participant in the Graduate and Professional School Financial Aid Service (GAPSFAS), Educational Testing Service, Princeton, New Jersey 08540. All applicants for financial aid must file a GAPSFAS form. Copies of the form are available locally in most colleges and universities; they may also be obtained by writing directly to Princeton. The completed form must be returned to the Graduate and Professional School Financial Aid Service by January 9.

Fellowships and Graduate Scholarships

Fellowships and graduate scholarships are provided from the general funds of the College, from the gifts of alumnae and other generous donors, and from private foundations. The majority of these awards are made on the basis of an annual competition. For the 1981-82 year, fellowships carry a stipend of \$3500 in addition to full tuition. Fellowships are available only to students who have completed one full year of graduate work. For the 1981-82 year, graduate scholarships carry a stipend of \$3000 in addition to full tuition; they may be held by students at all levels of graduate work leading to the M.A. or Ph.D. degree.

Fellowships and Scholarships in the Award or Nomination of the College

Bryn Mawr College Fellowships are offered annually in all fields of study in the Graduate School of Arts and Sciences, although Fellowships are not awarded in every field in any given year. Fellowships are awarded by the Committee on Graduate Awards on the basis of a determination of special merit.

Alumnae Association Fellowship and Scholarship support is provided from the contributions of former graduate students to the Alumnae Fund and through special annual grants made by Alumnae Regional Scholarship Committees, including those of New Haven and Cambridge, Princeton, New York, Eastern Pennsylvania and Western Pennsylvania.

Marion Louise Ament Fellowship. Graduate fellowships in Spanish are occasionally awarded from the fund established in 1966 in honor of Marion Neustadt, Class of 1944.

The Elizabeth Eaton Butterfield Fund for Graduate Scholarships was established in 1978 as a memorial by friends and family of Mrs. Butterfield, Class of 1935, founder and for many years President of the Bryn Mawr Book Sale of Cambridge, Massachusetts.

The Henry Joel Cadbury Fellowship Fund in the Humanities was established in 1973 by the Board of Bryn Mawr College in honor of Henry Joel Cadbury, Trustee Emeritus. The fund was made possible by donations from current and former trustees and directors of the College and friends of Dr. Cadbury in order to provide annual support for graduate students in the Humanities who have reached an advanced stage of their graduate work.

The Bertha Reed Coffman Fellowship Fund was established in 1964 through the estate of Bertha Reed Coffman, a teaching fellow at the College in 1906-1907.

The Theodore N. Ely Fund. A fellowship or scholarship in Art or Archaeology is awarded to a graduate student from the interest on this fund, which was established in 1959 by bequest of Katrina Ely Tiffany, Class of 1897.

The Folly Ranch Fund was established by an anonymous gift in 1974. The income is used for graduate and undergraduate scholarships in honor of Eleanor Donnelley Erdman, Clarissa Donnelley Haffner, and Elizabeth P. Taylor, Class of 1921, and Jean T. Palmer, Class of 1924.

The Grace Frank Graduate Fellowship Fund in the Humanities was established in 1979 in memory of Grace Frank who taught French at Bryn Mawr from 1936 to 1951. The income is used to provide graduate fellowships to students in the humanities.

The Margaret Gilman Fund. A fellowship or scholarship in French is awarded from the interest on this fund, which was established in 1958 by bequest of the late Margaret Gilman, Professor of French at Bryn Mawr College.

The Marguerite Bartlett Hamer Fellowship Fund was established in 1979 through the estate of Marguerite Bartlett Hamer, A.B. 1915, M.A. 1917, to provide fellowship support for graduate students in History.

The Howard Lehman Goodhart Fellowship is awarded to an advanced student in medieval studies.

The Helen Schaeffer Huff Memorial Research Fellowship is awarded for a year of research work in Physics or Chemistry at Bryn Mawr College. If other qualifications are equal among a number of candidates, preference will be given to a student whose field of research overlaps the fields of Chemistry and Physics. This fellowship is normally awarded to a postdoctoral candidate to allow continuation of a research program. In exceptional cases, candidates who have not completed the work for the doctorate will be considered. The amount of the stipend will be determined on the basis of the candidate's qualifications.

The Anne Cutting Jones and Edith Melcher Scholarship Fund was established in 1972 from the estates of Anne Cutting Jones (Ph.D. 1925) and her close friend for many years Edith Melcher (A.B. 1923, M.A. 1924, and Ph.D. 1928). The income is used for scholarships for graduate and undergraduate students in French.

The S. Maude Kaemmerling Scholarship was established in 1959 by the estate of S. Maude Kaemmerling and increased by a gift in 1965. The income on the fund is to be used for graduate scholarships and fellowships.

The Louise Kingsley Scholarship Fund was established in 1972 through the bequest of Dr. Kingsley (Ph.D. 1931). Income from the fund is used for graduate scholarships and fellowships.

The Melodee Siegel Kornacker Fellowship in Science was established in 1976 by Melodee Siegel Kornacker, Class of 1960. The income is used for a graduate fellowship in Biology, Chemistry, Geology, Physics, or Psychology.

The Samuel H. Kress Foundation Fellowships in varying amounts are awarded to advanced graduate students in History of Art.

The Mabel Gibson La Foy Fund for Graduate Tuition Grants was established in 1975 by Margaret La Foy Rossiter (M.A. 1938, Ph.D. 1941) in honor of her mother, Mabel Gibson La Foy.

The Elizabeth R. Laird Scholarship Fund was established in 1969 by the will of Elizabeth R. Laird, Ph.D. 1901. The income is used for graduate scholarships in any field of study.

The Katharine Elizabeth McBride Fellowship. In the 75th Anniversary Year a fund for a graduate fellowship in honor of Katharine McBride, President of the College from 1942 to 1970, was established by certain alumnae. The endowment of this fellowship was increased by a gift from the Class of 1925 on its 40th reunion. The fellowship is awarded in any department to a candidate for the Ph.D. degree who is about to complete two years or more of graduate work.

The Emmy Noether Fellowship was founded by gifts from many donors in memory of Emmy Noether who came to Bryn Mawr College from Germany in 1933 and who died April 14, 1935. It is open to students in the United States and in foreign countries who are advanced graduate students of Mathematics. It is awarded by the Department of Mathematics of Bryn Mawr College and may be used, subject to the approval of the Department, at any institution in the United States or in a foreign country.

The Bertha Haven Putnam Fellowship in History Fund was established in 1960. The income from the fund is used for fellowships or scholarships in history.

The Max Richter Fellowship Fund was established in 1962 and increased in 1965 by gifts from the Trustees of the Richter Memorial Foundation. Income from the endowment provides fellowship support to advanced students interested in public affairs.

The Mildred Clarke Pressinger von Kienbusch Fellowship was established in 1964 by a gift in honor of Mildred Clarke Pressinger von Kienbusch of the Class of 1909. The income on this fund is to be used for a graduate student working toward the doctorate. This award may be made to a beginning graduate student.

The Mildred and Carl Otto von Kienbusch Fellowships were established in 1977 by bequest of Carl Otto von Kienbusch. The income on this fund is to be used for graduate students working toward the doctorate. These awards may be made to beginning graduate students.

Scholarships and Fellowships under the Plan for the Coordination of the Sciences. The departments of the natural sciences and Mathematics administer a fund for the Coordination of the Sciences, given to the College in 1935 by the Carnegie Corporation of New York. Its purpose is to encourage and facilitate teaching and research in fields such as biochemistry, biophysics, geochemistry, geophysics, and psychophysics.

From this fund, the Committee for the Coordination of the Sciences awards fellowships, scholarships, assistantships, post-doctoral research fellowships, or other grants as seem appropriate.

The Mary Waddell Fellowship Fund provides grants of \$1000 each for the study of Mathematics to daughters of American citizens of Canadian descent.

Whiting Fellowships in the Humanities, made possible through the generosity of the Mrs. Giles Whiting Foundation, are awarded to a select number of students in their final dissertation year. In 1981-82, Whiting Fellowships carry a stipend of \$625 per month, plus tuition, together with a modest allowance for research expenses and a family allowance if needed. These fellowships are available in the Departments of Classical and Near Eastern Archaeology, English, French, German, Greek, History, History of Art, Latin, Music, Philosophy, Russian, and Spanish.

Fellows by Courtesy. Fellows who continue their studies at the College after the expiration of their fellowships may, by a vote of the Trustees, receive the rank of Fellow by Courtesy.

Honorary Fellows. Students who are awarded fellowships on academic merit and who decline the financial benefits of the award receive the title of Honorary Fellow.

Traveling Fellowships and Awards

The Bryne-Rubel Fund was established in 1973 by the estate of Eva W. Bryne, B.A. 1916, M.A. 1917, and Ph.D. 1925. The income of the estate may be used to fund one or more one-year fellowships in English, Latin, Greek, or Archaeology to a graduate student at Bryn Mawr for study outside the United States. The Bryne-Rubel Fellowships may also be used by students in English or Latin at Bryn Mawr.

The Christopher Fund was founded by an anonymous donor in 1977. The income is to be used for travel expenses of Bryn Mawr graduate students to Massenzia in Rome. If not required for Massenzia, then the income should be used for travel costs of graduate students in Classical and Near Eastern Archaeology studying in the Mediterranean.

Massenzia Scholarships for use at Massenzia in Rome (see page 17) are awarded to students whose program requires them to stay in Rome for one year. A special *Massenzia Fund* has also been established for students who could benefit from a brief stay in Rome.

The Anna Ottendorfer Memorial Research Fellowships in Teutonic philology and German language and literature, founded in 1907 by Mrs. Anna Woerishoffer in memory of her mother, is to be applied to the expense of study and residence for one year at a German university. It is awarded to a woman student who has completed at least one year of graduate study at Bryn Mawr College and who shows ability to conduct independent investigations in the fields of Teutonic philology or German literature. The choice of a university is determined by the holder's preference, subject to the approval of the faculty.

The Ella Riegel Fellowship or Scholarship in Classical Archaeology was founded in 1937 by bequest of Ella Riegel. It is awarded on the recommendation of the Department of Classical and Near Eastern Archaeology to advanced students in this subject. It is given for study abroad but may, at the discretion of the Department, be used at Bryn Mawr College.

The Fanny Bullock Workman Travelling Fellowship for a year of study or research abroad was established in 1927 by bequest of Fanny Bullock Workman and by gift of her husband, Dr. W. Hunter Workman. It is awarded to a candidate for the degree of Doctor of Philosophy at Bryn Mawr College who could not have the advantages of such a year without assistance. At the discretion of the faculty, the fellowship for any one year may be divided between two students, or the same student may hold the fellowship for more than one year.

Graduate Scholarships for Foreign Students

In addition to the regular Bryn Mawr College graduate scholarships, there are two special scholarship competitions of particular interest to foreign students or students whose native language is other than English.

The Marguerite N. Farley Scholarships for Foreign Students, which provide tuition and a stipend to cover room and board on campus, are offered to students from any country outside the United States and Canada. Occasionally a fellowship is awarded from this fund to a foreign student who has completed at least one year at Bryn Mawr.

Special Foreign Scholarships for French, German, Hebrew, Italian, and Spanish, which provide tuition and a stipend to cover room and board on campus plus \$250, have been established for students whose languages form a part of the Bryn Mawr curriculum. Holders of these scholarships are asked to devote four or five hours a week to supervised teaching or other assistance in the appropriate language department. The Special Scholarship for French has been named in memory of Marcelle Pardé who was a member of the French Department of Bryn Mawr College between 1919 and 1929. The Special Scholarship for Spanish has been named in memory of Miguel Catalan, distinguished Spanish physicist and friend of Bryn Mawr.

Duties of Fellows and Scholars

Fellows and Graduate Scholars are required to carry a full academic program at Bryn Mawr College. Occasionally they are asked to perform some small service which contributes to the graduate program. Fellows are not permitted to accept other appointments. Scholars, with the permission of the Dean of the Graduate School of Arts and Sciences, may undertake a limited amount of paid work.

Each Traveling Fellow is asked to present a written report of the work done during the fellowship year. This report should be submitted to the Dean of the Graduate School of Arts and Sciences for transmittal to the student's department by about May 1.

Assistantships

Teaching Assistantships are available in some departments. For 1981-82, these positions carry salaries of \$4200-4410 for half-time

work, \$2800-2940 for one-third-time work, and also include tuition without fee. The duties differ with departments. In science departments, assistantships provide teaching and laboratory experience.

Graduate Assistantships are available in some departments. These positions provide full-time tuition and wages according to the hours of work given to the department.

Research Assistantships are frequently available in the Departments of Biology, Chemistry, Geology, Physics, and Psychology.

All Assistants are expected to maintain good academic standing during their terms of appointments. In cases of academic exclusion (p.86), assistantships are cancelled.

Internships and Field Work Placements. The Department of Education and Child Development offers each year one internship, with stipend, in school psychology. The intern is placed in the Child Study Institute and receives supervision there.

Tuition Grants

Tuition grants are available for full-time and part-time students. Gifts from the Alumnae Fund have increased the number of these grants in recent years.

Graduate Prize

The Susan B. Anthony Memorial Prize, commemorating the great work of Susan B. Anthony for women, was founded by her friend, Anna Howard Shaw, and her niece, Lucy E. Anthony. It is offered from time to time to a graduate student at Bryn Mawr College who has published or submitted in final form for publication the best study dealing with the industrial, social, economic, or political position of women. The award is made by a committee of which the President of the College is chairman.

Loan Funds

National Direct Student Loan Program. These loans are available to students who are United States citizens or permanent residents and who are registered for at least two units of graduate work. Application is made on a special form which is obtained from the Financial Aid Office after a student has been admitted to the Graduate School of Arts and Sciences. The application and a GAPSFAS form (see page 87) must be filed by April 1. Allocation of loan funds is made late in June.

Guaranteed State Loan Program. Students are encouraged to apply for Guaranteed State Loans, available to United States citizens who are studying at least half-time, through their local banks. Part of the application is completed by the Financial Aid Office.

The Students' Loan Fund of the Alumnae Association of Bryn Mawr College was established by the Class of 1890 for the use of students who need to borrow money in order to continue their college work and for the purpose of receiving contributions, no matter how small, from those who are interested in helping students obtain an education. The fund is managed by the Alumnae Scholarships and Loan Fund Committee.

Loans may be used for purposes approved by the Committee, who try to provide small loans to meet special emergencies or to help with tuition payments. As a rule, money is not lent students in their first semester of graduate work. Not more than \$500 may be borrowed by a student in any one year. The total for four years must not exceed \$1500.

While the student is in college no interest is charged; after the student leaves college the interest rate is modest. The entire principal must be repaid within five years from the time the student leaves college at the rate of twenty percent each year. Students who wish to borrow from the Loan Fund may obtain application blanks for this purpose from the Office of Admissions and Awards of the Graduate School of Arts and Sciences.

U.S. Steel Foundation Graduate Level Loan Program. A fund of \$10,000 has been established for students in Anthropology, Biology, Biochemistry, Chemistry, Economics, Education and Child Development, Geology, History, Physics, Political Science, Psychology and Sociology. Loans of amounts up to \$2000 will be made to cover expenses in connection with tuition, books, research equipment, living expenses, travel, summer research. Conditions are as for the Alumnae Association Loan Fund, see above.

Career Planning Office

Graduate students are invited to make use of the services of the Career Planning Office. These services include counseling on career interests and concerns; information on specific openings for summer, temporary and permanent, full- and part-time positions; consultation on job-hunting methods. Upon request the Career Planning Office also maintains and makes available to prospective employers the credentials of graduate students and alumnae. The credentials include curriculum vitae and faculty and employer references.

Child Care

The Phebe Anna Thorne School

Situated on the Bryn Mawr Campus, and integral to the Department of Education and Child Development, the Thorne School is a laboratory school which enrolls young children from nearby communities in creative, pre-kindergarten programs. The School has for its aim the fullest and happiest development of each child within the context of a group and offers sessions Monday through Friday, September-May. For fees and information, write to or telephone the Director, the Phebe Anna Thorne School, Bryn Mawr College, Wyndon and Roberts Road, Bryn Mawr, Penna. 19010, (215) 527-5490.

New Gulph Children's Center

Child care on a space available basis for Bryn Mawr College families may be found at the New Gulph Children's Center, Conestoga and Sproul Rds., Villanova, just ten minutes from the campus. Children 3 months through 6 years old are eligible. The center is open five days a week, 7:30 a.m.-5:30 p.m.

The center, conducted by professional staff, incorporates appropriate age group developmental activities with high quality group care, plus nursery school and kindergarten programs. Flexible schedules can be arranged to accommodate the programs of students. A minimum of nine hours regular use per week is required.

The fee scale is based on the age of the child and the number of hours at the center. Tuition for the semester is payable in advance. Financial assistance is available. Early registration for all programs is essential. For more information contact the Director at 688-2411.

Graduate Student Council

The Graduate Student Council, composed of one representative elected annually from each department offering a graduate program, is the instrument through which graduate students may voice their concerns and needs to the faculty and administration. When appropriate, the Council also initiates and carries out specific programs to meet these needs.

As a result of its representative structure, the Council provides a means of communicating with students in all departments. Council meetings are held at least once a month in the Graduate Lounge located in the M. Carey Thomas Library. Graduate student opinion is sometimes solicited through questionnaires, to enable the Council to reflect the various opinions of all its constituencies.

Representatives of the Graduate Student Council sit on various College committees, including the Council of the Graduate School of Arts and Sciences and the committees concerned with the Library and with academic computing facilities. In addition, the Graduate Student Council is represented at meetings of the Board of Trustees and at faculty meetings. The Council also plays a major role in establishing policies and procedures related to graduate housing at Glenmede.

The Graduate Student Council has recently voted to initiate an annual graduate student activities fee of \$5, which will help support events such as lectures or colloquia of particular interest to graduate students in Arts and Sciences.

Graduate Student Housing

Housing is available for about forty graduate students at Glenmede, the graduate residence center, which is approximately one-half mile from the main campus. The Glenmede complex includes a main house, with fourteen single rooms and three large double rooms, and additional single rooms (and one double) in the smaller houses on the estate. The College provides basic furniture, but students must supply their own linen, bed pillows, desk lamps, rugs and curtains. (Local rental services can provide blankets and bed linen; arrangements may be made on arrival.)

There is no food service at Glenmede. Residents can take advantage of the kitchen facilities available in each of the buildings at Glenmede, or can purchase meal tickets, or contract for the complete meal plan for the College dining halls on campus.

Room contracts are mailed in the late spring to those who have indicated interest in College housing on their admission applications; the contracts are sent out in the order in which these initial applications were received. The signed contracts must then be returned to the Office of the Graduate School of Arts and Sciences, with a deposit, and rooms are then assigned on a space-available basis. The deposit will be deducted from the residence fee; it will be refunded only if the student cannot be accommodated.

A student who has reserved a room will be held responsible for the residence charge unless notice of withdrawal is sent in writing to the Dean of the Graduate School of Arts and Sciences by August 15. See the fee schedule (Appendix B) for the current room charge, which is payable one half by September 1 and one half by January 10. Residence on campus covers the period from the opening of the College in the fall until Commencement Day. Baggage will be accepted at the College after August 20. It should be sent prepaid, addressed to Glenmede, Bryn Mawr College, and marked with the owner's name.

Health

Medical Services

The College maintains an Infirmary, with in-patient and out-patient services, open during the academic year but closed in the summer. There is twenty-four hour physician and RN coverage. The medical staff may be consulted without charge by students residing in campus housing. Students living off campus pay for health services, as rendered, at a nominal fee. If special consultation or private nursing care are necessary, the student must meet the expense. The College reserves the right to require a student to withdraw, for reasons of health, upon the recommendation of the College physician.

A Counseling Service is available to all students. Consultation with a psychological social worker or psychiatrist should be arranged by appointment through the Infirmary secretary. Counselors can be reached through the Infirmary in cases of emergency. Should long term therapy be necessary, the student is referred for outside private care.

The Infirmary offers use of its rooms for sleeping privileges, without meals or nursing care, for a small charge.

Medical Requirements

All entering students must file medical history and evaluation forms with the Infirmary before registration for classes.

Insurance

All graduate students are urged to carry health insurance valid in the United States. For those who need coverage, student policies are offered and should be purchased in September during the open enrollment period.

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Mrs. Maw
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Mr. Thomas

Directions to Bryn Mawr College

From the North and Northeast

The College is most easily reached using the Schuylkill Expressway (I-76). From the North and Northeast there are three approaches to I-76.

1. Walt Whitman Bridge, I-676 to I-76
2. Benjamin Franklin Bridge, I-76 (Vine Street) continuing west on I-76
3. Pennsylvania Turnpike to Exit 24 (Valley Forge Exit) continuing east on I-76

From these approaches you may use the following routes:

1. CITY AVENUE Take Exit 41 (City Avenue-U.S. 1 South) and proceed on City Avenue until City Avenue intersects route 30 (Lancaster Avenue). Turn right on Lancaster Avenue and drive approximately four miles to reach the center of Bryn Mawr. Turn right on Morris Avenue (Arco gas station) and follow the underpass. There is a College parking lot one and one-half blocks along Morris Avenue on the left.
2. GULPH MILLS Take Exit 27 (PA 320, Gulph Mills). Follow PA 320 south and turn left at the first traffic light onto Old Gulph Road. The College is three miles down the road on the right. A College parking lot is located at the third entrance on the right after Roberts Road.

From the West

Pennsylvania Turnpike to Exit 24 (Valley Forge Exit). Continue east on I-76 and take the Gulph Mills route described above.

From the South

Follow I-95 through Wilmington, Delaware, to Chester, Pennsylvania, then take the PA 352-Edgemont Avenue Exit. Immediately look for, and follow, signs for PA 320 North. Continue north on PA 320 for approximately 10.5 miles. Turn right on Bryn Mawr Avenue and follow until it crosses Lancaster Avenue and joins Morris Avenue. Turn left on Morris Avenue and follow the underpass. There is a College parking lot one and one-half blocks along Morris Avenue on the left.

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Appendix A

Faculty on Leave

For the Year 1981-82

Robert J. Dostal, *Assistant Professor of Philosophy*

Gloria Flaherty, *Associate Professor of German*

Rosalie C. Hoyt, *Professor of Physics*

Annette Niemtzow, *Assistant Professor of English*

Brunilde S. Ridgway, *Professor of Classical and Near Eastern Archaeology*

Enrique Sacerio-Garí, *Assistant Professor of Spanish*

Grace Armstrong Savage, *Assistant Professor of French*

Kathleen S. Wright, *Assistant Professor of Classical and Near Eastern Archaeology*

For Semester I, 1981-82

Hans Bänziger, *Professor of German*

Julia H. Gaiser, *Associate Professor of Latin*

Steven Z. Levine, *Associate Professor of History of Art*

Mario Maurin, *Professor of French*

Judith R. Shapiro, *Associate Professor of Anthropology*

For Semester II, 1981-82

Peter M. Briggs, *Assistant Professor of English*

Isabelle Cazeaux, *Professor of Music*

Gregory W. Dickerson, *Associate Professor of Greek*

Richard H. Gaskins, *Assistant Professor of Philosophy*

George L. Kline, *Professor of Philosophy*

Mario Martelli, *Professor of Mathematics*

Robert E. Washington, *Associate Professor of Sociology*

Appendix B

Fees 1981-82

These fees are in effect for the academic year 1981-82. Faced with the rising costs of higher education, the College has had to raise tuition (and some of its fees) in each of the last eight years. Further increases may be expected.

An application fee of \$25 is required of citizens of the United States and Canada and of foreign students presently in the United States. The application fee is waived for non-U.S. citizens living outside the United States.

Tuition

Full-time students:

\$6250 a year

Part-time students:

2 academic units \$4200 a year (or \$2100 a semester)

1 academic unit \$2100 a year (or \$1050 a semester)

Auditors:

Fees for auditors are the same as those for students registered in courses for credit.

Continuing enrollment (see page 13): \$250 a semester

Bryn Mawr alumnae/i who have received one or more advanced degrees from Bryn Mawr College (M.A., M.S.S., M.L.S.P., Ph.D.) are entitled to take up to two units of work (four semester seminars) at one-half the normal tuition, subject to the following provisions:

1. Admission to all seminars must follow approved admissions procedures.
2. Specific seminars are open on a space-available basis.
3. Full tuition must be paid if the course is to be counted toward an advanced degree from Bryn Mawr College.

Payment of Fees

Tuition for each semester must be paid at the time of registration. Graduate students living at Glenmede, the graduate residence center, will be billed in advance of each semester and must pay for their rooms before the semester begins. Students whose fees are

not paid will not be permitted to continue in residence or to attend classes. Degrees will not be awarded to any student owing money to any College facility, nor will any transcripts be issued. Questions concerning the payment of fees should be directed to the Office of the Comptroller.

Summary of Expenses for the Academic Year 1981-82

Regular

Tuition fee (full-time)	\$6250
Room in graduate student housing	\$1840
Graduate Student Council activities fee	\$5

Contingent

Application fee	25
Continuing enrollment fee	500
Course in Reading German or French	140
Health insurance (United States citizens)	92.50
Health insurance (foreign students-mandatory)	130
Graduation fee for all graduate degrees	50
Charge for microfilming Ph.D. dissertation	42
Late registration fee	10
Add and drop fee	10
(after the first week of a new semester)	

Meals

Students wishing to eat in the College dining halls on the main campus can buy meal tickets. Students living at Glenmede, the graduate residence center, can either prepare their own meals in the kitchen facilities which are provided in each residential unit at Glenmede, or can buy individual meal tickets, or contract for the full meal plan for the College dining halls on the main campus. In 1981-82, the full meal plan is \$1210 for the academic year.

Refund Policy

In the event of withdrawal from the Graduate School of Arts and Sciences, refunds will be made according to the following schedule:

During the first and second weeks of the semester: 75 %

During the third through sixth weeks of the semester: 50 %

After the sixth week of the semester: no refund

For students living at Glenmede, the graduate residence center, the charge for residence is \$1840 in 1981-82. In the event

that a student wishes to leave Glenmede, a partial refund will be made only as and if the College is able to reassign the space to someone else not currently living at Glenmede. Students themselves may not dispose of rooms assigned to them, and a signed room contract is a commitment for the entire year.

Procedure for Securing Refunds

Written notice must be received by the Dean at least one week prior to the effective date of withdrawal. Students who have received loans under NDSL or GSL to meet any educational expenses for the current academic year must make an appointment with the Loan Officer before leaving the campus to arrange for appropriate repayment of the loans in question.

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BRYN MAWR

*The Graduate School
of Arts and Sciences*

1981-83

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BRYN MAWR
COLLEGE CALENDAR

**THE GRADUATE SCHOOL
OF SOCIAL WORK &
SOCIAL RESEARCH**

1980-82





Correspondence

CORRESPONDENCE regarding admission to the Graduate School of Social Work and Social Research should be addressed to:

Office of Admissions
The Graduate School of Social Work and Social Research
Bryn Mawr College
300 Airdale Road
Bryn Mawr, Pennsylvania 19010

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Bryn Mawr College Calendar
The Graduate School of
Social Work and Social Research

Issue for the Sessions 1980-82
September 1980 *Volume LXXIII Number 4*

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*The information in this Calendar is the best available at the time of publication.
The contents are subject to change and are not binding on the College.*

ACADEMIC CALENDAR 1980-81

FIRST SEMESTER—1980

<i>Aug. 25-26</i>	Waiver examinations—M.S.S. program
<i>Sept. 2</i>	Graduate residences open
<i>Sept. 3</i>	Orientation begins
<i>Sept. 4-5</i>	Registration of all students
<i>Sept. 4</i>	Convocation. First-semester seminars begin
<i>Sept. 11</i>	First day of practicum
<i>Sept. 12</i>	Ph.D. Foreign Language Examinations
<i>Oct. 17</i>	Fall vacation begins at 5:00 p.m. (Practicum continues.)
<i>Oct. 20-31</i>	Ph.D. Preliminary Examinations
<i>Oct. 22</i>	Fall vacation ends at 9:00 a.m.
<i>Nov. 26</i>	Thanksgiving holiday begins at 6:00 p.m.
<i>Dec. 1</i>	Thanksgiving holiday ends at 9:00 a.m.
<i>Dec. 11</i>	Last day of seminars for first semester. (Practicum continues.)
<i>Dec. 17-19</i>	Examinations
<i>Dec. 23</i>	Winter vacation begins at 5:00 p.m.

1981

<i>Jan. 5</i>	Practicum resumes
<i>Jan. 16</i>	Last day of practicum in first semester

SECOND SEMESTER—1981

<i>Jan. 19</i>	Convocation. Second-semester seminars begin
<i>Jan. 23</i>	Ph.D. Foreign Language Examinations
<i>Mar. 13</i>	Spring vacation begins at 5:00 p.m. (Practicum continues.)
<i>Mar. 23</i>	Spring vacation ends at 9:00 a.m.
<i>Mar. 23-Apr. 3</i>	Ph.D. Preliminary Examinations
<i>Apr. 1</i>	Submission of Ph.D. dissertations for Commencement, 1981
<i>Apr. 30</i>	Last day of seminars and practicum
<i>May 4</i>	Master's Papers due
<i>May 6-8</i>	Examinations
<i>May 17</i>	Commencement

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Katherine D.K. Lower, Ph.D. (University of Wisconsin), *Professor Emeritus*

Marcia L. Martin, M.S.W. (University of Pennsylvania), *Lecturer*

Ruth W. Mayden, M.S.S. (Bryn Mawr College), *Lecturer and Assistant Dean*

Robert R. Mayer, M.S.W. (Columbia University), Ph.D. (Brandeis University), *Professor and Dean*

Patrick T. McCarthy, M.S.W. (University of Pennsylvania),
Lecturer

Mary Patterson McPherson, Ph.D. (Bryn Mawr College), LL.D.,
Litt.D., *President of the College*

Carolyn E. Needleman, Ph.D. (Washington University), *Associate Professor*

Ruth O. Stallfort, M.S.S. (Simmons College), *Associate Professor and Secretary of the Faculty*

Milton D. Speizman, M.S.S.W. (University of Wisconsin), Ph.D. (Tulane University), *Professor*

James Tanis, Th.D. (University of Utrecht), *Director of Libraries*

Lloyd A. Turner, Ph.D. (University of Pennsylvania), *Assistant Professor*

William W. Vosburgh, Ph.D. (Yale University), *Associate Professor*

Joanna K. Weinberg, J.D. (Harvard University), *Assistant Professor*

Greta Zybon, D.S.W. (Western Reserve University), *Associate Professor*

Part-Time Lecturers

Terry Eisenberg Carrilio, Ph.D. (Bryn Mawr College)

Winston Collins, M.S.W. (University of Houston)

Barbara Daniel Cox, M.Ed. (Antioch University)

Annick Doeff, M.S.S., Ph.D. (Bryn Mawr College)

Judith R. Felton, M.S.W. (Rutgers University)

Mary Q. Frantz, M.S.S. (Bryn Mawr College)

Harriet Goldstein, M.S.Sc. (Western Reserve University)

Manuel Jaime Gutierrez, Ph.D. (Temple University)

Lyne Harmon, M.S.W. (Smith College)

Carolyn H. Lee, M.S.S. (Bryn Mawr College)

Braulio Montalvo, M.A. (Columbia University)

Deborah D. Shain, M.S.S. (Bryn Mawr College)

Willie V. Small, M.S.W. (University of Michigan)

Donald M. Weyl, M.P.A. (The Pennsylvania State University)

†On leave semester II, 1980-81

Advisory Council of the Graduate School of Social Work and Social Research

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McDonough
Mary Scott McElroy
Dolores G. Norton
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Lee Roach
Isadore Scott
Richard Worth

Student Members:
Catherine R. Higgins
Master's student to be elected

Faculty Members:
to be elected

Ex Officio:
Alexandra Quandt Aldridge, *Director of Resources*
Ruth W. Mayden, *Assistant Dean*
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Mary Patterson McPherson, *President*



PHILOSOPHY AND HISTORY OF THE SCHOOL

The Graduate School of Social Work and Social Research of Bryn Mawr College is committed to scholarly study and to professional practice that promotes individual and institutional change, consistent with the goals of a just society. Given this commitment, social work practice with individuals and families is viewed in the context of those environmental forces and public policies that affect people. Practice with institutions and their policies is viewed in the context of the needs of individuals affected. The commitment of the School is implemented through three degree programs: a two-year program leading to the degree of Master of Social Service, a one-year post-Master's program leading to the degree of Master of Law and Social Policy, and an advanced program leading to the degree of Doctor of Philosophy.

The Master of Social Service (M.S.S.) program provides a thorough grounding in (1) theories of personal and social behavior, (2) social policies which affect those behaviors, and (3) methods of clinical and institutional intervention. Classroom instruction is reinforced by concurrent field instruction in the use of those theories and methods. The program provides three areas of concentration: clinical treatment of individuals and families, the management of services to individuals and families, and the development of social policies and programs. The curriculum is organized around theories and methods of intervention rather than fields of practice in the belief that the former provide a more effective basis for professional practice and are of more lasting relevance. The M.S.S. program is accredited by the Council on Social Work Education.

The Master of Law and Social Policy (M.L.S.P.) program provides a course of study designed for persons holding or currently working toward a professional degree in social work, another human service profession, or in public administration or policy analysis related to social welfare. The program covers a range of legal problems and processes important for the delivery of social services and for the shaping of social policy. The program also requires supervised field instruction in an area of joint social work and legal practice.

The Doctor of Philosophy (Ph.D.) program is a course of study designed to deepen and broaden a student's knowledge of social welfare as a field of investigation, and of theories of individual, small group, and institutional functioning. In particular, the program is designed to develop advanced skill in conducting research, in building theories for social work practice, and in analyzing policy.

The School, since its beginning, has been characterized by an emphasis on scholarship as essential to the development of social work practice. This commitment is reflected in the School's interdisciplinary faculty, in its strong curriculum in research, and in its expectation that research skills will be an integral part of the methods of intervention taught in each of the areas of concentration. The School was the first in the United States to offer the Ph.D. degree in social work and has always required scholarly activity as a criterion for appointment to the faculty.

The educational philosophy of the School is based on the assumption that learning depends on the active involvement of the student in the educational process. A number of practices make Bryn Mawr distinctive in this respect. Most courses are conducted as seminars small enough to allow dynamic interaction among students, and between students and faculty. Faculty are readily available to students outside the classroom. The policy of mutual accountability described elsewhere makes students responsible for evaluating their educational experience in ways which affect the practices of the School. Finally, students participate in all committees that establish policies for the School and thereby help to shape the environment of their learning.

Racial and Ethnic Minorities and Social Work Education

Social work as a profession and social welfare as a field of public policy deal necessarily with the way in which society treats minority groups or persons with unequal power. The implications of this fact are central to the educational process of the School.

There are a vast number of minorities in this country. The

term "minority" refers to a group of people who represent only a small percent of the population. For our purposes "minority" most aptly refers to those groups who, because of their racial ethnicity, have become oppressed. Such groups include Blacks, Puerto Ricans, and Chicanos as well as Native Americans and Asian Americans. In its efforts to deal with the needs and perspectives of racial minorities, the School has chosen to focus on those groups most prevalent in the Delaware Valley, such as Blacks and Hispanics.

Because racism constitutes a profound problem in this country and because its expression violates basic values and purposes in social welfare, the Graduate School of Social Work and Social Research seeks to combat racism directly in its educational program. Special attention is paid to the development of content concerning these minorities in the curriculum. Such material is fostered in each of the courses taught in the School and emphasized in special, required courses on Racial and Ethnic Perspectives for Social Work Practice (see p. 38). In addition the School is committed to hiring as members of its faculty persons who are multi-racial in their perspective, and who seek to relate their subject matter to the needs and aspirations of groups seeking an equal measure of social justice.

The School accepts the responsibility for educating social workers prepared to serve all the persons within the social welfare system and will strive to change those economic, political, and social structures which constrain the opportunities and potential of minority groups. Accordingly the School seeks to achieve the following purposes:

- a. To understand various perspectives which grow out of the experiences of racial oppression.
- b. To socialize ourselves to non-oppressive social work practice, teaching, and research.
- c. To create a supportive environment in which racial groups feel a sense of belonging and feel encouraged to express their diversity and commonality.
- d. To create a learning atmosphere in which all members of the community work toward the elimination of personal, institutional, and societal racism.

History of the School

The Graduate School of Social Work and Social Research was opened at Bryn Mawr College in the fall of 1915 as the Carola Woerishoffer Graduate Department of Social Economy and Social Research. It was established as a tribute to Carola Woerishoffer, a Bryn Mawr graduate of the Class of 1907. An ardent social reformer, Carola Woerishoffer was killed in an automobile accident while investigating the conditions in labor camps for foreigners as an employee of the New York State Bureau of Industries and Immigration. The Department was the first graduate program of social work education in the United States to be offered by a college or university. Subsequently the name was modified from Social Economy and Social Research to Social Work and Social Research. In August 1970 it became one of the three Schools which comprise Bryn Mawr College.

The School opened with eight graduate students; no undergraduates were admitted. Under the initial plan, two-thirds of the student's time was given to the study of theory and statistics, the remaining third to "practical investigation," with a half year spent in "field work" in a social welfare organization in Philadelphia or New York.

The course of study was planned for one, two, or three years, with three years required for the Ph.D. degree and one and two years for a certificate. The Master of Social Service degree replaced the two-year certificate in 1947. Its plan of "field work" and its inclusion of work in labor and industrial relations and in community organization made it somewhat different from the other early schools of social work. Under its first director, Dr. Susan M. Kingsbury, four fields of study were offered: Community Organization, Social Casework, Industrial Relations, and Social and Industrial Investigation. Included among the organizations offering field work for students in these early days were: the Family Society of Philadelphia, the Children's Aid Society, the White Williams Foundation, the Big Sister Association, the Young Women's Christian Association, the Criminal Division of the Municipal Court of Philadelphia, the Social Services Department of the University of Pennsylvania Hospital, and various social settlements.

In 1919, Bryn Mawr became one of the six charter members

of the American Association of Schools of Social Work. In this period following World War I, social work education was rapidly changing in response to the continuous expansion of social work into new settings. The curricula of the schools responded to these changes in a variety of ways. At Bryn Mawr, preparation for social casework was expanded and additional courses in public welfare and social legislation were offered. However, the emphasis on research and social investigation which was central to the early curriculum of the School continued.

Bryn Mawr had the first doctoral program in social work education and awarded the first Ph.D. in 1920. The doctoral program at the School of Social Service Administration at the University of Chicago followed later in the 1920s. Today thirty-five schools of social work in the United States offer doctoral programs.

By 1935 Bryn Mawr was one of twenty-nine schools belonging to the American Association of Schools of Social Work. Twenty-five were in colleges or universities and four were independent schools. Bryn Mawr is currently a member of the Council on Social Work Education, successor to the American Association of Schools of Social Work and the accrediting body for social work education.

In 1976 the new degree of Master of Law and Social Policy was established. The only one of its kind in the country, the program has become a model for schools of social work as well as for schools of law in integrating the relevant aspects of legal education with those of social work education. The program enhances the School's tradition of commitment to social reform.

The Graduate School of Social Work and Social Research currently has approximately 215 full-time students. A number of factors have contributed to this expansion: the acquisition in 1958 of a separate building and increased Federal support for education of social work, especially scholarship aid in the form of traineeships. At the time of its founding, the School admitted only women; since the late 1930s both men and women have been admitted and during the last ten years men have constituted about one third of the student body.

There are more than ninety graduate schools of social work accredited by the Council on Social Work Education in the

United States. Although many changes have taken place both at Bryn Mawr and in social work education, the vision of those responsible for the design of the School at its founding has been proven by experience to have been remarkably correct.

The School now has approximately 1250 living graduates. Since its inception it has granted awards to more than 1500 persons. Of that number, 97 have been awarded the Ph.D. degree, 15 the Master of Law and Social Policy, and the balance Master's degrees in social work.

Graduates of the School are located in all regions of the United States and many foreign countries. Their present positions range within a wide spectrum of governmental and voluntary organizations and agencies. They work in programs dealing with child and family welfare, community mental health, corrections, gerontology, health, housing, intergroup relations, legal services, mental retardation, prevention and treatment of alcohol addiction and drug abuse, neighborhood organization, public education, public welfare administration, social planning, social rehabilitation, and social welfare research. Approximately half are executives, supervisors or administrators, or consultants. Recipients of the doctoral degree are chiefly in teaching and research positions. Over the course of its sixty-five years, the School has graduated persons who have contributed substantially to leadership in both public and voluntary social welfare.

ADMISSION

General Procedures

The Graduate School of Social Work and Social Research is open to qualified graduates from accredited colleges or universities. Both men and women are admitted to the School and are accepted as candidates for the degrees of Master of Social Service, Master of Law and Social Policy, and Doctor of Philosophy.

Application for admission is made to the Office of Admissions of the School and must be supported by official transcripts of the applicant's academic record, both graduate and undergraduate. The Miller Analogies Test is required. Information concerning locations for taking the MAT is available upon request. A letter from the dean of each college or university attended and letters from two or more professors with whom the applicant did his or her preparation are required.

Applicants should have in mind a plan for financing their education and are asked to indicate any anticipated dependence on grants or loans.

A fee of \$25 must accompany the application. This fee is not refunded nor credited toward tuition. The closing date for applications is February 1.

A personal interview may be arranged with the Director of Admissions of the School. If the applicant lives a considerable distance from Bryn Mawr, an interview can usually be arranged with an appropriate person in the area.

In reaching a decision to admit, the applicant's entire academic record, performance on the Miller Analogies Test, life experience, and letters of recommendation are evaluated by the Admissions Committee in relation to the applicant's stated career objectives and in relation to the qualifications of other applicants.

Within ten days after official notification of admission to the Graduate School of Social Work and Social Research, an enrollment fee of \$100 is to be paid to the Comptroller of Bryn Mawr College. This fee is credited to the tuition for the first semester. It is not refunded if the student fails to register.

The principal practice focus for the first year in the Master of

Social Service program is either Social Casework or Social Policy and Program Development. Students are admitted into one or the other of these concentrations, and their academic course of study flows from this initial choice. Permission to transfer from one practice focus to another in the first year is rarely granted.

Recruitment of Minority Group Students

The School is committed to achieving diversity in the racial and ethnic composition of its student body. Special emphasis is given to attracting Black and Hispanic-American students in keeping with the population of the Delaware Valley. To implement this commitment the School actively recruits such applicants through campus visits and other forms of outreach by faculty, students, and alumnae/i under the direction of the Coordinator of Minority Student Recruitment. In addition, the School allocates financial awards as much as possible in keeping with financial need to facilitate matriculation of financially disadvantaged students.

Foreign Applicants

Although the School does not have a program of study uniquely designed for foreign students, a small number of applicants from other countries are admitted each year. Admission depends on the applicant's ability to undertake academic work in English, and to initiate a program of study that is consistent with the School's resources.

The closing date for applications is January 15 for admission the following September. Applications must include the scores of the Test of English as a Foreign Language (TOEFL); the Miller Analogies Test is not required. For information concerning the TOEFL write to: TOEFL, Educational Testing Service, Princeton, New Jersey 08540. Financial aid for foreign students is limited to the Farley Scholarship Fund.

Part-Time Study

A limited number of applicants for part-time study in the M.S.S. program are admitted each year. Such study must be completed over a three-year period. The usual pattern is to spread the first year of required courses over a two-year period, and to take the second year of study in a third year. This means that such students will not begin their practice courses and concurrent field instruction until the second year of part-time study.

Continuing Education

The Continuing Education Program is open to individuals who wish to add to their current knowledge of the field of social welfare or social work practice. The program includes the regularly scheduled courses offered by the School to its degree candidates. Institutes and seminars are also offered. Persons not holding the M.S.S. degree or its equivalent are not allowed to take electives unless they have completed all of the required courses or their equivalents at Bryn Mawr or another school of social work. Persons holding an M.S.S. or comparable degree are eligible to enroll in any course depending on the availability of space.

Persons interested in applying to the Program should contact the Admissions Office for an application. A major factor in accepting an applicant will be the number of openings in the course(s) selected. Preference will be given to students enrolled for the degree.

Students who have taken courses in the Continuing Education Program and who wish to apply to the program leading to the degree of Master of Social Service, Doctor of Philosophy or Master of Law and Social Policy are free to do so. However, the admissions procedures are *different* and *separate* from those in the Continuing Education Program. A student who is admitted to the M.S.S. Program may receive transfer credit for a maximum of four courses taken within the three years previous to enrollment in the degree program. Transfer credits in

the M.L.S.P. and Ph.D. Programs will be considered on an individual basis.

The fee per course is given in the structure of fees for the School on p. 76. Alumnae/i of the School may take courses in a program for which they already hold a degree for one half the amount listed.

FINANCIAL AID

General Procedures

A limited amount of financial aid is available for full-time students in the Graduate School of Social Work and Social Research. Fellowships and scholarships are provided from the general funds of the College, the Alumnae Association, from the gifts of alumnae/i and other generous donors, and from government agencies and private foundations.

Bryn Mawr also participates in the National Direct Student Loan Program and the College Work-Study Program.

The terms of the various awards and loans differ. Merit, need, and career interests are factors to which consideration is given in making awards. Requests for financial assistance are considered after the application process is completed and applicants have been admitted. *The School requires that all students seeking financial aid file a financial statement with the Graduate and Professional School Financial Aid Service (GAPSFAS).* This form will be sent upon request after a student is admitted. Students who have resided with their parents for the two years preceding their application for admission, or who have received from parents more than \$600 in financial support, or who have been claimed as an exemption on their parents' federal income tax report must complete the section of the GAPSFAS pertaining to their parents' financial situation.

Applicants and students currently enrolled in the School are expected to seek guaranteed state loans available through the state in which they have established residence, as for example, through the Pennsylvania Higher Education Assistance Authority. These can be obtained through a number of local banks.

Special Scholarship Funds

The Fanny Travis Cochran Scholarship Fund. Established in 1936 on the occasion of the 50th Anniversary of the College. Miss Cochran was a member of the Class of 1902.

Alfred and Mary Douty Student Loan Fund. A gift from the Alfred and Mary Douty Foundation established this self-perpetuating student loan fund.

Marguerite N. Farley Scholarship Fund. Established in 1956 to provide scholarships for foreign students.

Lillian and Jack Poses Scholarship Fund. Established by Lillian Shapiro Poses, a former student in Social Work and Social Research, and her husband, for student aid in the Graduate School of Social Work and Social Research.

Joan Sall Rivitz Memorial Scholarship Fund for Doctoral Work in Social Work and Social Research. This fund was established as a memorial to Joan Sall Rivitz who received her M.S.S. in 1963 and her Ph.D. in 1972. It provides an award of \$5,000 which is given each year for one year to the doctoral student whose approved dissertation proposal is judged by the faculty to contribute significantly to the field of social welfare.

J. Henry Scattergood Scholarship. Established by a grant of the Friends Freedmen's Association to scholarship endowment for the support of black students at Bryn Mawr. The fund is named in memory of a former Trustee who served as Treasurer of the College for 26 years.

ACADEMIC STANDING

Advising

At the beginning of each academic year a member of the faculty is assigned as an adviser to each student. Responsibilities of the adviser include: providing educational guidance in the selection of a student's course of study; orienting the student to the School, its curriculum, and its policies; and identifying resources for resolving problems that may be interfering with the student's educational performance.

In the Master's programs advisers are responsible for reviewing the academic performance of students at the end of each semester. They inform the Dean when such performance places a student in academic jeopardy and present such information to the Committee on the Educational Performance of Master's Students. The adviser also consults with first-year students about their choice of second-year field placement, and about the Master's Paper for those who choose to undertake one.

In the doctoral program the advisers are responsible for reviewing the progress of their advisees at the end of each semester and for reporting anyone who is in academic jeopardy to the Doctoral Committee of the faculty. The adviser recommends a student for candidacy to that Committee upon completion of the course requirements and assists the student in identifying a dissertation topic and sources of funds with which to research it.

Registration

All students work out a two-year plan of study with their adviser at the beginning of their first semester. This plan is revised during the registration period for each subsequent semester. Once students have registered, any changes in that registration must be approved by their adviser. Students who do not complete their registration during the specified period must pay a Late Registration Fee, and those who change their registration after the first week of classes must pay an Add-Drop Fee.

Transfer Credit

Transfer credit in an amount up to the equivalent of one year of the program for the M.S.S. may be allowed for work done at other accredited schools of social work or comparable programs of study. Such transfer credit will not be given until the candidate has completed a semester's work at Bryn Mawr. In each case transfer credit must be recommended by the student's adviser and approved by the Dean.

Ph.D. students may petition the Doctoral Committee through their adviser for transfer of credits to the Ph.D. program, and decisions are made on an individual basis after one semester's work is completed at Bryn Mawr.

University of Pennsylvania Reciprocal Plan

Under the Reciprocal Plan, courses at the University of Pennsylvania Graduate School of Arts and Sciences are available during the academic year to Bryn Mawr graduate students. All full-time students and such part-time students as intend to become candidates for degrees are eligible. The number of courses which may be taken at the University is limited to one per semester. The procedure for registration and payment of tuition fees is the same as for students enrolled wholly at Bryn Mawr, with the exception that the student will present a letter of introduction to the Dean of the Graduate School of Arts and Sciences of the University of Pennsylvania when registering there. The University charges a small general fee for the use of the library, a library deposit which is refundable, and fees for late registration. Ordinarily students are not advised to undertake such work during their first year at Bryn Mawr.

Residence Requirements

For both the Ph.D. and M.S.S. degrees one year in full-time coursework is required. Two sequential semesters in one academic year meet this requirement.

Persons registering for full-time programs should consult with advisers before undertaking employment concurrent with

a full-time program because of the demands upon time expected from academic work. Full-time students must give priority to academic commitments.

Writing Laboratory

A writing laboratory is provided for students who must sharpen their writing skills to perform at appropriate academic and professional levels. Practice in the usage of Standard English grammar, instruction in scholarly writing, exploration of social work library resources and report forms are included. Students identified as needing such skills will be assigned to this weekly laboratory for a seven-week period in the fall of the first semester of matriculation.

Grading: Mutual Accountability

The essential educational relationships in the School are based upon the principle that members of the faculty and students are accountable to each other on an equitable basis. Procedures to implement this principle have been developed through the joint effort of members of the faculty and members of the Student Association.

It is the instructor's responsibility to provide the student with an evaluative grade of Satisfactory or Unsatisfactory for the course or seminar on the provided Grade Sheet. A qualitative analysis of oral or written presentations, examinations, or other educational performances is also required. In addition, the instructor may choose to provide a written analysis of the student's performance as a private communication between the instructor and the student.

The student's responsibility, as a condition of receiving a grade, is to (a) participate in either an oral or written mid-term analysis of the quality of the course or seminar, and (b) prepare and sign as a communication to the instructor and to the Dean an end-of-semester evaluation of faculty performance. The student's evaluation of the instructor is not made available to the latter until the instructor's evaluation of the student has been turned into the Dean's Office. These contributions make

systematic the student contribution to the development of the School, particularly with regard to questions of faculty reappointment, promotion, and tenure. Completion of an additional end-of-semester analysis of the instructor's performance, which is a confidential communication between the instructor and the student, is optional.

If a student is graded Unsatisfactory, or is reported to be doing unsatisfactory work in more than one course, he or she must appear before the Committee on Evaluation of the Educational Performance of Master's Students. The Committee is composed of two elected faculty members, two elected students, the Coordinator of Field Instruction, and the Dean. The student's adviser and an advocate chosen by the student also appear before the Committee. The Committee is responsible for deciding what remedial action shall be taken, including whether or not the student should be excluded from the School.

The grade Incomplete is given only when extenuating circumstances prevent the student from completing the requirements of the course on time and must be accompanied by a date on which the work will be completed. Incompletes not removed by this date will be changed to Unsatisfactory or the term Incomplete will remain permanently on the record.

First-year M.S.S. students must complete all work by July 31 in order to move into the second year. Doctoral students must complete all work by November 1 of the academic year following that in which the work was due. In addition, requests to change the grade of a doctoral student from Incomplete to Satisfactory or Unsatisfactory must be approved by the Doctoral Faculty.

Exclusion

The College reserves the right to exclude at any time any student whose academic standing is unsatisfactory or whose conduct renders him or her an undesirable member of the College community. In such cases fees will not be remitted or refunded in whole or in part; fellowships and scholarships will be cancelled. Findings regarding academic standing are made by the Committee to Evaluate the Educational Performance of Master's Students as described above.

Withdrawal and Leaves

A student who has withdrawn from the School is not automatically readmitted. After a year's absence he or she may request readmission and should consult the Dean and the Director of Admissions.

A student whose academic work is in good standing may apply to the Dean for a leave of absence after consulting with his or her adviser. A leave is generally requested for an academic year. If the student wishes to return to the program at the end of that year, he or she should write to the Dean requesting reinstatement. Available space in the program and length of time the student has been away from the School will be factors affecting reinstatement. A student extending a leave beyond the approved period will need to reapply for admission to the School.

The student may, on the recommendation of a physician, request a medical leave of absence for reasons of health at any time. Readmission may be granted upon recommendation of the Dean based upon evidence of the student's capacity to meet the demands of his or her program.

Degree Candidacy

Students become candidates for advanced degrees only after they have met the School's requirements and, in the case of the Ph.D. degree, have made formal application which has been approved by the members of the Doctoral Faculty.

Continuing Enrollment

Students who have completed the required course work for the Ph.D. degree and are continuing independent work on their dissertation must retain their enrollment and degree candidacy by registering for one or more seminars each semester or must register under the Continuing Enrollment Plan. Such students will be billed unless they have asked for a leave of absence in writing and a leave has been granted. The Dean may grant such leaves up to a period of two years. Students may not continue

on leave of absence for more than two years without receiving approval from the Doctoral Faculty. Without such approval the student will be dropped from the program. In addition, students who are not planning to register for academic seminars but who are planning in any given semester (1) to present themselves for College examinations, (2) to use the College libraries, (3) to consult members of the faculty on a regular basis must register under the Continuing Enrollment Plan. Such enrollment does not carry academic credit.

Membership in Professional Organizations

Students are urged to join one or more related professional organizations, such as the National Association of Social Workers, the Council on Social Work Education, American Public Welfare Association, Child Welfare League of America, the Association for Clinical Social Workers, the Gerontological Society, and the National Association of Black Social Workers. These organizations, particularly the National Association of Social Workers, give students an immediate opportunity to participate in professional activities with leaders in the field and thereby influence the future of social work. Such organizations offer reduced rates for students and provide a number of benefits, including publications and insurance programs.

MASTER OF SOCIAL SERVICE

The program for the M.S.S. degree provides concentrated study in three alternative areas of social work practice: clinical social work, social service management, and social policy and program development. These concentrations are supported by a set of required courses that are common to the field as a whole. Candidates must complete a minimum of eighteen semester courses, including field instruction.

Common Requirements

The common required courses are designed to introduce students to the range of social and behavioral science theories, social policies, analytical methods, and values that form the context of social work practice. Students must complete their common requirements during the first year. These requirements are:

Social Welfare Policy and Services (151 or 153)

Normal Growth and Behavior or Personality Theory (141 or 143)

Introduction to Research and Statistics (131)

Research Design (132)

Social Theory and Social Work (146)

Racial and Ethnic Perspectives for Social Work Practice (154)

Concentrations

A concentration is a sequence of courses that prepares a student for practice in a particular area of social work. Each concentration consists of a practice course and concurrent field instruction each semester of the two-year M.S.S. program, and additional selected courses considered essential for basic preparation. Students should be clear about their choice of concentration upon entering the School since this choice provides the focus for their two-year plan of study.

Clinical Social Work

Clinical social work is the specialization, within the social work profession, which is involved in the provision of direct services to individuals, families and small, non-kinship groups. It requires special knowledge of social resources, human behavior, and the relationship of human behavior to the larger social institutions. This sequence, building on a background in social casework, has as its primary goal the extension and refinement of knowledge and skills in the assessment of bio-psycho-social problems and in appropriate interventions to restore or enhance social functions.

The required courses are:

Social Casework I and II (111, 112)

Field Instruction I and II (161, 162)

Clinical Social Work I and II (211, 212)

Field Instruction III and IV (261, 262)

Psychopathology (244)

Social Service Management

Social Service Management has as its central goal the improvement of the structure and quality of social services. Social Service Management prepares students to assume the responsibility for organizing and marshalling the delivery of services; identifying and translating client needs into appropriate agency programs; training and supervising of other social welfare personnel; manpower development and examination and evaluation of policies; and developing the monitoring of organizational structure and procedures in relation to delivery of services.

The Social Service Management concentration is elected in the second year. During the first year students follow the same course of study as those concentrating in clinical social work.

The required courses are:

Social Casework I and II (111, 112)

Field Instruction I and II (161, 162)

Social Service Management I and II (213, 214)

Field Instruction III and IV (261, 262)

Social Policy and Program Development

The aim of this concentration is to combine the tradition of advocacy which has characterized community practice in social work with the more technical skills involved in governmental planning and policy analysis. The concentration prepares students for careers that involve helping neighborhoods and client groups effectively advocate their needs, as well as helping public officials make sound decisions that reflect social welfare values.

The required courses are:

Philosophies and Theories of Community Social Work (101)

Advocacy Methods (102)

Field Instruction I and II (161, 162)

Planning Methods (201)

Administrative Methods (202)

Field Instruction III and IV (261, 262)

Any two of the following electives

Evaluative Research (334)

Economics for Policy Analysis (302)

Group Process (301)

Design of Service Delivery Systems (303)

Social Welfare Policy and Issues: Specific Areas (351, 352, 353, 354, or 355)

In addition, a non-credit, biweekly seminar to assist students in integrating their classroom and field instruction will be required on an experimental basis in the spring semester of the 1980-81 academic year.

Field Instruction

Field instruction is an integral part of the curriculum for the Master of Social Service degree. The purpose of such instruction is to provide the opportunity for the student to apply theory in order to deepen knowledge and develop skill in its use. Students' assignments are based on their concentration and are planned to give content, sequence, and progression in learning. Each student is assigned a placement designed to broaden the student's experience and further develop some of

the areas in which the student is relatively inexperienced. Because the goal of field instruction is to maximize learning, use of places of employment as the field setting is strongly discouraged.

Field instruction and the practice seminar must be taken concurrently in order to enhance the blend of practice and theory. Most of the field settings are in the five-county Philadelphia metropolitan region. Federal and state agencies in Washington, D.C., Harrisburg, and Wilmington are also used.

The range of field placements includes programs dealing with aging, child day care, child welfare, community mental health, consumer protection, juvenile and adult corrections, drug and alcohol abuse, education, family services, health care, housing, legal services, the legislative process, maternal and child health, mental retardation, neighborhood organization, physical rehabilitation, psychiatric services, public welfare, school social work, social planning, social welfare research, vocational rehabilitation, women's issues, and youth services.

Waivers

It is possible for students to waive by written examination to be given prior to the beginning of the fall semester any required course with the exception of field instruction, practice seminars, and racial and ethnic perspectives for social work practice. A waiver does not reduce the number of courses required for the M.S.S. degree, but allows the student to take an elective in place of the waived course. The waiver examination may be taken only once and must be taken prior to enrolling for the first year. Part-time students may exercise the option of taking a waiver prior to the second year of their three-year plan of study.

Certification for Social Work in the Schools

If a student is interested in social work in the schools in Pennsylvania, certification may be acquired through the Department of Education and Child Development. The choice of cer-

tain electives both in the Graduate School of Social Work and Social Research and in the Department, and field instruction in a school setting will prepare a student for such certification as part of the M.S.S. program. Students interested in such an option should confer with the appropriate faculty person in the Department of Education and Child Development.

COURSE OFFERINGS

Course numbers can be interpreted as follows:

100's	first-year required
200's	second-year required
300's	electives
00's	social policy and program development
10's, 20's	clinical and social service management
30's	research
40's	social and behavioral science
50's	social policy
60's	field instruction

The School reserves the right to cancel scheduled courses on the basis of enrollment or availability of instructors.

Social Policy and Program Development: Philosophies and Theories of Community Work Mr. Holden

Community Social Work is based on the assumption that many crucial human problems, such as poverty, racism, and the oppression of groups because of age, class, and sex, derive largely from the structure of institutions, communities, and from the larger social-economic order. Consequently, philosophies and strategies for change at the institutional, community, and societal level have been developed. The aim of this seminar is to introduce students to a broad range of community social work philosophies and theories and to assist each student in clarifying his or her own approach. Specific emphasis is placed on increasing skills in the analysis of communities, organizations, and social policies and on increasing basic practice skills in community work.

02. *Social Policy and Program Development: Advocacy Methods* Ms. Needleman

This course examines a range of strategies for attempting to make social policies and programs more responsive and more effective in meeting human needs. Methods covered include community organizing, legislative lobbying, advocacy within organizations, advocacy planning, and research oriented toward social change and political action. Each method will be critically analyzed in terms of its appropriateness for different contexts; the forms it can take and the skills it demands; and the personal risks, costs and rewards it involves for both practitioners and their clients. Besides providing a basic practical knowledge of advocacy methods and a forum for analyzing the advocacy aspects of field placements, the course is intended to give students a basis for deciding what specific skill areas they wish to emphasize in their second-year elective choices.

11. *Social Casework I* Mr. Cox, Ms. Harmon, Mrs. Kerson, Joyce Lewis, Mrs. Martin

The function of social casework in social work as related to the problems of individuals and primary groups is considered. Application of the processes of assessment, contracting, and casework services is examined. Attention is given to understanding the person and the dynamic relationship with his or her social-cultural environment, the conflicts and issues in social work practice, and to the impact of setting on practice.

12. *Social Casework II* Mr. Cox, Ms. Harmon, Mrs. Kerson, Joyce Lewis, Mrs. Martin

Understanding of the basic processes applied to casework practice in varying age groups, areas of problem and agency settings is deepened. Theories of communication, social casework and social group work are examined in terms of their application to practice. Increasing use is made of students' case materials. The seminar studies the relationships among purpose, skill, social resources, social systems and human needs.

31. *Introduction to Research and Statistics* Mr. Collins, Mrs. Kronick, Mr. McCarthy

The goal of this seminar is beginning functional knowledge of problem formulation, data assembly, and data analysis

techniques. Emphasis is on the organization of data, extraction of information from existing data, and interpretation of information. Classroom time is divided between lectures and ongoing research related to problems of neighboring public social service agencies. (This seminar does not meet the statistics requirement for the Ph.D. degree.)

2. *Research Design* Mrs. Alexander, Mr. McCarthy, Mr. Vosburgh

This course is intended as an introduction to formulating research questions and methodologies around social work related issues. Students will develop the skill of critique and evaluation of published research designs, as well as an understanding of the skills necessary to successfully design and implement a research project of their own. Methodologies to be discussed are sampling, questionnaires, interviewing techniques, participant observation, and historical and bureaucratic record use. Analytical skills of interpreting data and the ethics of research will also be discussed.

1. *Normal Growth and Behavior* Ms. Eisendrath, Mrs. Martin

This seminar considers major biological, psychological, social, and cultural determinants of normal human growth and behavior. It examines the psychological and social dilemmas and tasks confronted by individuals at different developmental stages of life.

3. *Personality Theory* Mr. Lichtenberg

Fundamental ideas in personality theory are presented which are considered to be especially pertinent to the various practices of social workers. Presentation leans heavily upon psychoanalytic theory, but students are encouraged to study in several theories of personality of their own choosing. Emphasis is upon general principles connected with the determination of the shape and content of an individual's personal-social functioning.

6. *Social Theory and Social Work* Ms. Needleman

Starting with a general consideration of theory and its relevance to social practice, this course provides a working acquaintance with major contemporary sociological models which have special bearing upon social work. The course emphasizes analyses of the family, the community, social

deviance, social, stratification, conflict and power, intergroup relations, professions, bureaucracy, and social movements.

51. *Social Welfare Policy and Services: Historical Perspectives*
Mr. Speizman

The organization and growth of social welfare and social work as major social institutions are examined from historical and philosophical viewpoints. The evolution of social welfare attitudes and services in Great Britain and the United States is studied with attention given to the philosophical systems within which developments have taken place. Particular attention is given to the establishment of the current social welfare system in the United States and proposals to reform or change it. The role of social work within that system is described, and its future role discussed.

53. *Social Welfare Policy and Services: Social Policy Analysis*
Mr. Holden, Ms. Joffe

This course begins with a discussion of some of the leading theoretical statements on contemporary social policy and social services, then moves to a case study approach in different policy areas. Child care, health care, and income maintenance services receive special emphases.

54. *Racial and Ethnic Perspectives for Social Work Practice*
Section (1) *Race and Public Policy* Faculty

An examination of the way in which racism affects public policy in a wide range of social welfare institutions: education, housing, health, employment, politics, welfare.

Section (2) *Organizational Change* Ms. Cox

The focus of this course is on the dynamics of intergroup relations in organizations, and methods which can be used to foster greater participation of minorities in decision making within organizations.

Section (3) *La Familia Puertorriquena* Mr. Gutierrez

An examination of the migratory streams of Hispanic-Americans with particular attention to the stresses and experiences of Puerto Rican families in coping with the American urban environment.

Section (4) *The Black Community and Family Practice* Ms. Small

The course will examine the social dynamics that are characteristic of the Black community and will explore ways in which social work practice can be adapted to better meet the needs of Black children and families.

11. *Field Instruction I and II* Faculty

12. Supervised experience in using basic social work skills is provided in a field setting. The field instructors are agency staff members and are responsible for facilitating the student's learning. Field Instruction I and II are taken concurrently with 101 and 102 or 111 and 112. Students spend two full days per week in the field during the regularly scheduled hours of the assigned agency.

1. *Social Policy and Program Development: Planning Methods* Mr. Mayer, Mr. Turner

This course examines planning as a process of making public choices between equally appealing alternatives. The process involves policy or program conception, selection, implementation, and evaluation. The process is applied in individual classroom exercises designed by each student.

2. *Social Policy and Program Development: Administrative Methods* Ms. Frantz, Mr. Weyl

This course is designed to develop in the student an awareness and understanding of administrative procedures and techniques employed in the implementation of policies or programs. The course will examine various techniques of personnel management, such as the civil service system, management by objectives, staff development, management information systems; as well as techniques of fiscal management, such as budgeting and cost effectiveness analysis.

21. *Clinical Social Work I* Ms. Eisendrath, Ms. Shain, Mrs. Stallfort, Miss Zybon

The primary goal of this seminar is the refinement of knowledge and skills in differential diagnosis and treatment. Content of the course emphasizes biological, psychological, social, and systemic assessment as the basis for interventions. Students are encouraged to develop a range and variety

of roles in the service of specific populations with specific needs. Attention is given to current practice research.

212. *Clinical Social Work II* Ms. Eisendrath, Ms. Shain, Mrs. Stallfort, Miss Zybon

This is an integrative seminar which builds on and extends the content of the first semester. Specific content is determined by seminar participants who select problems, populations, methods of intervention, and professional issues for study.

- 213, *Social Service Management* (two semesters) Mrs. Kerson

- 214 The course in social service management is divided into three parts. The first part organizes the content of social service management under five topics to be used in the students' analyses of their agency: organizational theory, decision-making, management and supervision, resource development, and measurements of effectiveness and efficiency. The second part of the course concentrates on developing interpersonal skills for managers. The third part calls on the special areas of expertise which students have begun to develop during the year in their field placements and reading.

244. *Psychopathology* Ms. Carrilio, Ms. Doeff, Ms. Felton
This course examines deviations from normal development from a range of perspectives including the biological, intrapsychic, interpersonal, and social-cultural. The major psychopathological syndromes, namely the psychoses, borderline and narcissistic disorders, and neuroses will be studied and the respective implications for treatment discussed.

- 261, *Field Instruction III and IV* Faculty

262. Second-year field instruction provides an opportunity for the student to more narrowly focus the development of skill. It is taken concurrently with Clinical Social Work, Social Service Management, and Social Policy and Program Development. For second-year students the instruction ordinarily consists of three days per week for each of the two semesters. Students who elect two days per week in the field will be required to carry an additional course. This option is open to Social Policy and Program Development students.

301. *Group Process* Mrs. Soffen

This seminar provides a laboratory experience in group interaction and communication. Through an analysis of their own

group's dynamics, students study the characteristics of the group process and develop more effective leadership/membership competencies. Theoretical and practical applications are made to other groups through extensive reading and outside group observations.

2. *Economics for Policy Analysis* Mr. Turner

This course is concerned with the economic approach to social policy analysis. Topics include the economic theory of government, the supply and demand for public services, cost-benefit and cost-effectiveness analysis, and equity and efficiency considerations. Applications of these methods to issues in housing, labor markets, health care, and income maintenance will be examined.

3. *Design of Service Delivery Systems* Mr. Vosburgh

The initial focus of this course is upon structure and process in formal organizational types especially relevant to social welfare: rational bureaucracies, voluntary associations, professions, federations, social movements, and total institutions. The course then moves to a discussion of issues in such areas as organizational change, policies affecting women and minority groups, authority, decision-making, and interorganizational relations.

4. *The Ombudsman and Other Advocacy Systems* Mrs. Vosburgh

Institutional arrangements for communication, redress, and advocacy for citizens and consumers in their dealings with various levels of government are reviewed. Emphasis is given to the development and application of a classification scheme for such organizations and to the consideration of such models as the classical ombudsman and the decentralized agency. Comparative material is used from various American schemes and such foreign experience as that in Scandinavia, Great Britain and New Zealand.

1. *Theories of Family Therapy* Miss Zybon

This seminar provides a framework within which students can understand the philosophy, basic concepts, and intervention techniques of working with families and couples. Differences between major schools of family therapy are examined to allow students to choose that method which is most congenial to them as therapists and which is most useful to the clients they

serve. The focus is on family systems and the changes which can be made to improve family and individual functioning. Healthy and maladaptive family interaction patterns are examined from the current and intergenerational view. Included are basic treatment principles, problem areas, and the ecological perspective. Attention is given to student interest.

312. *Behavioral Intervention* Mr. Cox

This course presents a conceptual orientation and specific strategies and techniques of behavioral treatment in a variety of psychiatric settings. Such an orientation attempts to relate intervention to knowledge derived from research and requires evaluation of outcome based upon objective definitions and measurable procedures. This approach uses an ecological environmental perspective in the evaluation of the individual's personal distress or problem. Of necessity, the course begins with a review of the issue of assessment and discussion of the advantages and limitations of single-case and group designs. Specific issues and applications follow which can be broadly characterized under three headings: inpatient, outpatient, and aftercare.

314. *Issues in Supervision* Joyce Lewis

This seminar is designed for those Master's students who will be expected to assume supervisory responsibilities. The seminar takes its direction from the function of supervision, which is seen as twofold: 1) the provision of more effective delivery of service to the consumer; and 2) the education and professional development of staff.

316. *Comparative Personality Theory* Mr. Lichtenberg

This seminar systematically examines and compares some of the major established personality theories as well as newer theories. There is an attempt to apply the theories critically to a range of social work situations and concerns, and evaluate their use to social workers.

318. *Change and Resistance to Change in Social Work* Mr. Lichtenberg

This course explores social work along the lines of a liberal-radical differentiation, ranging from analyses of daily life, through practice in agencies to social policies and programs,

to major change of the structures of society. Students are expected to participate in the development and management of the seminar within the constraints of the topic. It is preferred that individual experiences in change and resistance to change are shared and then put to theoretical articulation.

319. *Treatment of Children in Families* Mr. Montalvo
The seminar examines approaches to the understanding and modification of problems by intervention through the family. Emphasis is placed on careful examination of interactional patterns rather than systematic study of the total treatment process. The development of theory very closely related to the happenings in the family is attempted. Video tapes are used, along with readings and other sources of information.
320. *Marriage Counseling* Mrs. Martin
This is a clinical seminar which is restricted to second-year students who are currently working with couples in counseling situations. Emphasis is placed on a systems approach to intervention as opposed to conjoint marital therapy. Students are expected to provide clinical materials, the analysis of which will be important in the understanding of theory and the learning and utilization of practice skills in this area.
322. *Introduction to Gestalt Theory and Therapy* Joyce Lewis
This seminar is an introduction to gestalt theory and its therapeutic application. It includes attention to the development of the gestalt approach and its applicability to clinical practice, both individual and group. The seminar is both didactic and experiential. It does not prepare students to practice gestalt therapy. Limited to second-year students after interview with the instructor.
331. *Master's Paper* Faculty
A Master's Paper may be undertaken with the permission of two faculty persons who would serve as Readers, or as the result of a research project in a particular interest area with one instructor and a second Reader. Whether students are enrolled in such research projects or whether students are developing a Master's Paper independently with first and second Readers, one course credit will be given after satisfactory completion of the Master's Paper.

333. *Clinical Research* Mrs. Alexander
This seminar focuses on research as an adjunct to clinical treatment in social casework and mental health. Using existing studies as examples, a range of research designs and data collection techniques are examined. Ethical concerns, as well as selected issues in psychotherapy research are considered.
334. *Evaluative Research* Ms. Needleman
This course is designed to give students a working knowledge of various types of evaluative research, as well as a critical understanding of how evaluation is used in the field of social work and how it relates to policy formation, program planning, and administration and budgeting. The course will cover research designs and methods for need assessment, program monitoring and impact assessment, emphasizing the problems and possibilities of using such research as a practical tool for improving social service policy and practice. Projects will draw on students' field experience.
350. *American City in the Twentieth Century* Mr. Speizman
This course deals primarily with social transformations in the cities under the impact of rapid urbanization. It also considers political, aesthetic, and cultural changes in American cities. (Offered in conjunction with the interdepartmental program, The Growth and Structure of Cities.)

Social Welfare Policy and Issues

351. *Community Mental Health* Ms. Frantz
This course provides an overview of the development of the community mental health system and an examination of the roles of federal, state, and local governments in the delivery of services. Emphasis will be placed on analyzing a number of practical ideological and political issues facing the community mental health system.
352. *Child Welfare* Ms. Goldstein
Current issues and questions in the field of child welfare and their meaning for practitioners are considered. Content is drawn from areas such as child abuse and neglect (both institutional and parental), child care, health, adoptions, placement, and advocacy. The governmental and private child

welfare system is examined with special attention to home-based services to prevent separating children from their families.

53. *Gerontology* Mr. Broberg

Focused readings and discussions by students alternate with guest lectures by specialists in gerontology. Policies and issues in legislation, health, mental health, income maintenance, social service programs, research, housing, and nursing home care are considered.

54. *Health Care and Social Work Practice* Mrs. Kerson

This course uses the life cycle model as well as federal health policies and programs to explore the health problems of populations at risk. Health concerns of infants, mothers and children, adults, minorities and the elderly are explored. Additionally uniting each of the subjects is an emphasis on the relationship between social work practice and the social aspects of health care.

55. *Women's Issues* Ms. Joffe

This course explores, from both a historical and contemporary perspective, various aspects of the situation of women in American society. Social policies with particular relevance for women are examined, and women are discussed as both consumers and providers of social services. Among the specific areas covered in the course are AFDC and other income maintenance strategies, the women's health movement, family planning policies, child care and other policies affecting working women.

MASTER OF LAW AND SOCIAL POLICY

The Law and Social Policy program is designed for professionals in social work, in other human service professions, or in public administration and policy analysis related to social welfare. It provides a rigorous examination of legal processes, their relationship to the delivery of human services, and their role in shaping policy.

The Law and Social Policy program differs from joint-degree programs with law schools in that it does not require students to complete a conventional J.D. program alongside course work in another professional school. The concepts and materials of legal study have been reorganized for the benefit of professionals who do not intend to become practicing members of the bar. The goal has been to create new courses that analyze law as part of a larger social process, drawing on social science and normative methods to supplement legal analysis.

The program consists of eight required classroom courses plus field instruction. The courses are designed to convey basic skills of legal analysis, legal research, and techniques of advocacy. The central purpose of the program is to apply these skills to substantive and administrative problems in such fields as mental health, income maintenance, family and child welfare, race relations, and criminal justice. In addition, the program encourages students to identify and work critically with fundamental values underlying policy and practice in the human services—fair procedure, equal treatment, and personal liberty. Students also take part in supervised fieldwork and other activities sponsored by the program.

Persons who hold a Master's degree in social work or a related field are eligible to apply. Students admitted to the M.S.S. program must submit a separate application which will be reviewed during their first year at Bryn Mawr. If admitted, they may begin work toward the Master of Law and Social Policy following their first year in the M.S.S. program, and can complete both degrees in a total of two years and two summers.

Degree candidates in the M.S.S. or Ph.D. programs may

enroll in Law and Social Policy courses, subject to the requirements of those programs and to the availability of space.

Courses are taught in the late afternoon during the academic year and in intensive three-week summer sessions. Students may work toward the degree on a full- or part-time basis.

COURSE OFFERINGS

01. *The Courts and Social Policy* Mr. Gaskins, Ms. Weinberg
This course is a study of how courts interpret, apply, and sometimes guide or change the law. It examines critically the judicial method of argument—mastery of which is often called “thinking like a lawyer”—as it is used by judges and advocates. Students learn how to read court opinions and how to frame arguments in legal terms. The course emphasizes the strengths and limits of procedure in controlling official behavior, and the role of the courts in structural reform of institutions, such as mental hospitals, prisons, and housing authorities.
02. *Legislative and Administrative Processes* Mr. Gaskins, Ms. Weinberg
This course consists of a series of case studies illustrating the basic structure of legislative and administrative action, the legal problems of policy implementation, and statutory methods of controlling official discretion. Students learn how to read statutes and administrative regulations, and explore methods for improving their design and effectiveness. Substantive problems are drawn from health policy, civil commitment, affirmative action, protective services, and public welfare.
03. *Legal Research* Mr. Gaskins, Mr. Vosburgh
This course introduces the student to sources and methods of legal research and to strategies of using social and legal research in advocacy and policy analysis. Brief lectures and library exercises are used to communicate essential research skills, including use of statutes, regulations, government documents, court opinions, and legal periodicals. Students are given a variety of individual research assignments, with

emphasis on public welfare, family law, and issues drawn from students' chosen areas of practice.

404. *Advocacy and Negotiation I and II* Mr. Albert
405. This two-semester course combines the informal techniques and interpersonal skills of successful practice in law and social work, involving both judicial and non-judicial dispute management. The course encourages role-playing and critical analysis in various settings: client interviews, negotiating sessions, administrative hearings, and formal testimony of experts in court. Themes are selected from family law, mental health, corrections and rehabilitation, community action, and encounters with bureaucracy. The format is designed to explore the reactions and assumptions of lawyers and social workers involved in collaborative efforts. Guest speakers from both professions offer the opportunity for addressing the professional and practical issues in successful collaboration.
406. *Equality and the Law* Mr. Gaskins
- The treatment of equality as a central value in the legal and social dimensions of public policy is the subject of this course. A series of case studies illustrates the differences between the abstract or formalistic concepts of equality found in the legal system and the more concrete or substantive forms of equality used in analyzing economic and social structures. Areas covered include race and sex discrimination, poverty, employment, and education. Readings consist of legislation, court opinions, and selections from economic and social theory.
407. *Personal Rights and the Public Interest* Mr. Gaskins
- In this course students study the legal and social consequences of defining, protecting, and challenging the rights of individuals in the modern regulatory state. The course examines the sources of individual rights in legislation, constitutional law, and social theory; and traces the shifting history of personal protection, from the economic sphere in the nineteenth century to the recent emphasis on personality and autonomy. Problems are drawn from a variety of substantive areas: race discrimination in public accommodations, sexual privacy and abortion, the right to treatment, parent-child relations, and privacy of information.

38. *Special Topics in Law and Social Policy* Faculty

Each year the program offers one or more courses devoted entirely to policy and practice in a specific substantive field. Courses offered include *Income Maintenance*, *Mental Health Law*, *Criminal Procedure*, and *Implementing Court-Ordered Change*.

31. *Field Instruction* Mr. Albert

The Law and Social Policy program continues the tradition of social work education in supplementing classroom instruction with supervised work in the field. Students will be assigned placements that emphasize the interaction of law and social service. Arrangements will be as flexible as possible to allow for individual schedules and interests, including block placements during the summer. Students will be expected to spend one semester (at least two days per week) or part of one summer (at least six weeks) in an approved field setting. All proposals for fulfilling this requirement must be approved by the Director of the M.L.S.P. program as well as the Coordinator of Field Instruction.



DOCTOR OF PHILOSOPHY

The curriculum for the Ph.D. provides a program of study from which a person may enter one of many careers, depending upon the changing needs and opportunities in social welfare and the interests and capabilities of the individual. A foundation for research and teaching is central to the goals of the program. Development of a variety of research competencies is encouraged; preparation for teaching in all areas of the social work curriculum, graduate and undergraduate, is also provided. The study of social work practice emphasizes theoretical work. Social policy development and analysis is given special attention.

The Ph.D. program in social work and social research prepares the student for understanding the nature and interdependence of individual and societal needs, and developing and promoting means by which these needs can be met most fully. Successful completion of the Ph.D. degree presumes demonstration of the scholarly ability to pursue knowledge characterized by abstract logical thinking, critical evaluation, ability to reach new integration, and capacity to disseminate knowledge appropriately.

Admission

The procedures for applying to the Ph.D. program are the same as the general procedures for admission to the School described on page 19. In addition, a Master's degree from an accredited school of social work or social welfare and experience in the field are required. Exceptions may be made for students who have completed a Master's degree and satisfactory preparation in an allied field and present significant experience in social work or social welfare, or for students in the M.S.S. program whose competence and qualifications are demonstrated by performance in that program. The latter may be admitted after completing one year of the M.S.S. program.

To be admitted, applicants should have ability of a high order, intellectual curiosity, critical judgment, independence,

and broad general education. Decisions regarding admission are made by faculty members of the Doctoral Committee subject to the approval of the Dean.

Program of Study

The program is planned to broaden the student's knowledge of social welfare in general and, through intensive study and research, to deepen his or her knowledge in a particular area defined by the student. The curriculum includes the following areas:

Social Work and Social Welfare: Past and Present

Social and Behavioral Sciences

Social Research

Social Work Practice: Theories, Research, and Issues

Students are expected to organize their studies around a Major area or theme. The Area may be methodological or substantive and must lie in the general field of social welfare. The Area should be developed with the adviser and must be approved by the Doctoral Committee.

Minimum requirements include four courses in the Major Area, and an overall distribution of at least two courses in each of the general areas of the curriculum. In Social Work and Social Welfare at least one course shall be in Social Policy and one in History. In the Social and Behavioral Sciences at least one course must be taken in Social Theory and one in Behavioral Theory. In Social Research at least one course shall be in statistics and one in methodology.

In general, a minimum of twelve semester seminars plus two courses focusing on the dissertation topic are completed in preparation for the Ph.D. degree. Beyond the required seminars students may elect courses from the Law and Social Policy program. Students may also elect M.S.S. courses by arranging with the instructors to do doctoral level work. Courses may be taken in the Graduate School of Arts and Sciences at Bryn Mawr or the Graduate School of Arts and Sciences at the University of Pennsylvania under the Reciprocal Plan (see p. 26).

Requirements for Candidacy

Acceptance as a candidate for the Ph.D. degree is made by application to the Doctoral Committee and upon recommendation of the student's adviser. To become a candidate the following requirements must be met.

1. Completion of a minimum of one academic year in full-time residence in the Graduate School of Social Work and Social Research. The residence requirement is met by two consecutive semesters of study from September through May; three or four courses are to be taken in each of these semesters.
2. Satisfactory progress toward completion of the candidate's course of study.
3. A reading knowledge of a modern foreign language tested by a written examination. Students are encouraged to meet this requirement by taking the GSFLT (Graduate School Foreign Language Test) available through the Dean's Office. This examination can be taken at any time.

Requirements for the Degree

Candidates are eligible to receive the Ph.D. degree after meeting the following requirements.

1. Satisfactory completion of a minimum of twelve semester courses of doctoral level work and two tutorials in supervised work on the dissertation topic.
2. Satisfactory completion of the Preliminary Examination consisting of written examinations in four areas and an oral examination by the candidate's supervising committee. The examinations are intended to test the candidate's general knowledge in all of the curriculum as well as the Major Area, and are not intended to test familiarity with particular courses. Preliminary Examinations are scheduled in October and March. They may not be taken until the language requirement has been met.
3. The preparation of a dissertation judged to be worthy of publication. The dissertation must represent independent investigation and writing and must contain new material, results, or interpretations. A written dissertation

proposal must be developed by the student and approved by the supervising committee before work on the dissertation is begun. Significant changes in this plan in subject or methodology require notification to the entire committee.

4. A satisfactory Final Oral Examination in the special area in which the dissertation has been written.
5. The publication of the dissertation in whole or in part. Microfilming is accepted as a method of publication.

COURSE OFFERINGS

Course numbers can be interpreted as follows:

500's	doctoral courses (Master's students may enroll with permission of the instructor.)
00's, 10's	social work and social welfare: past and present
20's, 30's	social and behavioral sciences
40's, 50's	social research
60's, 70's	social work practice: theories, research, and issues
80's	tutorials

Not all courses are given each semester. The offerings in any given semester depend upon faculty availability and level of student registration.

501. *Introduction to English and American Social Welfare History and Thought* Mr. Speizman

Social welfare is examined as a historical institution. The development of a succession of philosophical systems within which this institution evolved is considered, and the influence upon both philosophy and welfare of social and economic changes is studied. Stress is placed upon historical and contemporary literature, which is examined for the light it casts upon the field of study. Anglo-American experience until 1930 is emphasized in this course.

02. *New Deal to Carter: American Social Welfare 1930-1980*
Mr. Speizman
The past half-century is studied intensively as the seminal period for contemporary social welfare programs. The collapse of traditional relief measures before the onslaught of the Great Depression, the ameliorative and reform measures of the Roosevelt administrations, and efforts to expand and correct these and other programs in the ensuing twenty-five years are examined, all with a view to understanding the weight of the past upon the present, and to judge the directions in which further change is most likely.
03. *Other Roads Taken: A Comparative Analysis of National Welfare Programs* Mr. Speizman
Social Welfare programs in various societies other than that of the United States are studied. The development of national responsibility for individual and societal well-being is examined initially. From that foundation the programs of selected and differing societies are analyzed. These include Western industrialized nations, such as the United Kingdom, the Federal Republic of Germany, and Sweden; socialist states, such as the Soviet Union, China, and the German Democratic Republic; and the efforts of the developing world to create viable welfare programs while modernizing. All of these systems are studied within the context of differing historical and social backgrounds and their possible relevance to the American future.
04. *American Postwar Social Thought* Mr. Speizman
This course is a careful examination of the books, chiefly outside of social work, which have been instrumental in the development of social and political movements since World War II. Selections range through philosophy, theology, psychiatry, economics, and sociology. They are works which have been widely read by the educated public and policy makers. Some of the authors represented in past terms are Reinhold Niebuhr, Robert Nisbet, John Dewey, Milton Friedman, Daniel Bell, David Riesman, J.K. Galbraith, and James Baldwin. The list changes every time the course is offered.
05. *Personality Issues in Social Policies and Programs*
Mr. Lichtenberg
This seminar is concerned with personality and policy; the assumptions about personality functioning in social policies;

the impact of public social policy on personality; the impact of personality factors on policies; personalities in policy-making positions; personality theories as origins for the development of social policy; and social equality and personality.

506. *Social Policy and the Family* Ms. Joffe
The main theme of this course is the relationship between the state and the family. Various social policies regulating family life are examined from a historical and contemporary perspective. Among the specific issues discussed are the recent rise of single-parent families, child care policies, juvenile justice policies, and current developments in marriage and divorce laws.
507. *Processes of National Policy Development** Mrs. Kronick
An analysis of the process through which national policy is formulated. The seminar includes analysis of the ways a policy agenda is set at the national level, national constraints on how problems can be formulated, the political process of developing legislative recommendations and the determinants of trade-offs. Dominant concerns of policy formation in the United States are contrasted with those of other nations. Particular weaknesses and strengths of the American process of policy formation are identified. Special attention is given to the role of values in policy debate and development.
508. *Gerontology: Theory and Research* Mr. Broberg
The origins and boundaries of gerontology are examined. Roles and role-expectations of the elderly in different cultures are compared. The demographic characteristics of the elderly and the physiological and psychological changes associated with aging are identified. Changes in the nature of human productivity in later life and the potential of the elderly as a political bloc are considered. Readings and discussion focus on findings and problems of research in each area.
509. *Women and Social Policy* Ms. Joffe
This course starts with a theoretical overview of the relationship between women and social structure in various societies, and the particular role of social policies in implementing this relationship. The course then moves to a consideration of the

*Offered subject to approval of Doctoral Faculty.

impact of contemporary feminism upon social policy in the United States. Child care, health, rape, and family planning services are among the specific policy areas covered.

20. *Comparative Personality Theories* Mr. Lichtenberg
Some of the more well known dynamics of personality theories are examined in relation to the development of the human personality. An attempt is made to understand the similarities and differences of the theories and to relate the theories to the development of the total person. Readings in the original works of many different theorists are undertaken.
21. *Freud's Psychoanalytic Theory* Mr. Lichtenberg
Examination is made of psychoanalysis as a personality theory. Special attention is paid to metapsychology in psychoanalytic theory and to psychoanalysis as social theory. Intensive analysis of basic writings by Freud and his early collaborators forms the focus of the seminar.
22. *Psychoanalysis after Freud* Mr. Lichtenberg
Psychoanalytic writings from the 1930s to the present are studied. Emphasis varies with class selection among the array of theorists and directions that have developed in psychoanalytic theory.
23. *Formal Organizations* Mr. Vosburgh
This seminar considers structure and process in large-scale organizations. Starting from major theories of social organization, the course focuses upon those organizations which are planned to coordinate the efforts of large numbers of persons to accomplish specific goals. Leadership, organizational pathologies and the role of the individual are considered.
24. *Occupations and Professions* Ms. Joffe
This course reviews classic and contemporary sociological approaches to the study of occupations and professions. The focus is on the dynamics of professionalization, the bureaucratization of professional work, professional/client relations, the entrance of women into professional roles, and related issues. Particular attention is paid to human service professions.
25. *Social Change and Social Policy* Mrs. Kronick
Contemporary patterns and problems of social change at the societal level are analyzed in the context of new theories of

institutional inadequacies. Special attention is given to the interaction of economic dilemmas implicit in the limits to growth, normative issues of distributive justice, equity and the common good, political issues of public welfare versus private welfare, and the definition of responsibility of government. Cross-cultural data are utilized to examine specific innovations and tensions in the welfare state including: the taxation problem and declining economic growth, new policies to provide income maintenance and prevent occupational disability; and policies designed to curb the expanding cost of health care.

526. *Fact and Value in Recent Social Theory* Mr. Gaskins
A study of reasons for and reactions to the methodological division between fact and value and the related separation of theory and practice in social policy. Positions surveyed will include the positivistic and phenomenological residues of Weber's theories, neo-Marxism, ethnomethodology, and structuralist models.
527. *Social Philosophy and the Problem of Ideology* Mr. Gaskins
The problem of ideology consists of clarifying the standpoint of the observer (or agent) who wishes to understand (or change) society. It requires asking what kind of value structure is imposed on the social environment and what the consequences are for social theory and public policy planning. The course begins with a careful reading of two classic sources on the nature of ideology (Marx and Mannheim) and then turns to consider the positivistic challenge to ideological thinking posed by natural scientific method. Particular attention will be given to modern critiques of science and technology which find elements of relativism and ideology hidden behind the pretense of objectivity (Kuhn, members of the Frankfurt School). Finally, the problem of ideology in the area of public policy will be discussed, particularly as it affects the choice between legal and political methods of social control.
540. *Data Analysis I* Mrs. Kronick
Data analysis is seen as one step in the research process. Statistical methods of analysis include descriptive and inferential statistics with major emphasis on partial and multiple correlation and regression, and analysis of variance and covariance. Knowledge of the assumptions and conditions under

which statistical methods are valid, and discrimination in the selection, application and interpretation of statistical tests are developed.

41. *Data Analysis II* Mrs. Kronick
Special attention is given to recent innovations, persistent problems and current issues in multivariate data analysis. Among the topics covered in this seminar are multiple factor analysis, multiple regression analysis and path analysis, techniques of analyzing qualitative data, and problems of handling cross-cultural data. The seminar concludes with an introduction to models used in the social sciences. Students are expected to prepare a paper based on an original multi-variable data analysis executed on the computer (usually through use of SPSS).
42. *Research Methodology* Mr. Vosburgh
In this seminar a study is made of contemporary methodological approaches to problems in social and behavioral research with application for social welfare. There is intensive coverage of survey research design, case study and clinical method, design of social experiments, and evaluation of social work programs.
43. *Clinical Research* Mrs. Alexander
This seminar will examine selected issues in clinical research, such as clinical vs. statistical prediction, single-subject vs. group designs, and the use of standardized measurement instruments. Ethical issues arising in research in clinical agencies will be examined. Students will also gain experience in content analysis. Issues in psychotherapy research will be addressed in depth as well.
44. *Participant Observation* Ms. Joffe
This course introduces students to the analysis and methodology of participant observation through involvement in a group research project in an institutional setting. The class also reads and discusses major works in the participant observation tradition.
45. *Historical Methodology in Social Welfare* Mr. Speizman
The use of historical research in social welfare is studied and applied. Selection of possible topics for study, uncovering sources, methods of research are among the topics covered.

The literature of historical methodology is examined and its lessons applied to social welfare. Development of skills in preparation and writing of research papers is stressed.

546. *The Design of Social Policy Research* Mr. Mayer
This course provides a methodology for designing research that is used in social policy-making. As such it is particularly useful for designing dissertation research dealing with the generation and testing of practice theory. The course provides a model of the policy-making or planning process; outlines three methods of policy research: the exploratory, the descriptive, and the explanatory; and provides a nine-stage process for designing research that is to solve a problem in policy-making.
547. *Assessment of Ego Development** Ms. Eisendrath
The purpose of this seminar is to examine intensively techniques for measuring ego development, the theoretical assumptions which underlie them, and their implications for designing clinical research.
548. *Directed Research with Computer-Based Data Sets** Mr. Turner
The seminar will be conducted as a directed research project using a large-scale data set, e.g., a national study of housing for the elderly. Students will be expected to develop a research design that is policy relevant, to carry out that design with appropriate statistical procedures, and to prepare an empirical analysis in keeping with accepted standards for publication.
560. *Introduction to Social Policy Development* Mr. Holden
The course will develop and apply a variety of analytic tools for the examination of a range of social policies. It will apply these frameworks with a concern for distinguishing the different governmental levels of policy formulation and implementation as well as the different stages in the process of policy development. The student is expected to develop in-depth knowledge of one substantive field through the analysis of a contemporary issue at the federal level.
561. *Intervention in Governmental Processes* Mr. Vosburgh
This course cuts across several levels of American government in identifying those points in the legislative process and the implementation of government programs where influence

*Offered subject to approval of Doctoral Faculty.

by professionals or client and citizen groups may be applied. Mechanisms, organizational vehicles, and strategies for exerting such influence are inventoried.

2. *Community Assessment* Ms. Needleman

This course helps students sharpen their skills in gathering information about communities for purposes of improving service delivery, policy analysis and planning, and social change efforts. Critical examination will be made of a range of specialized research methods useful for identifying community characteristics and needs, locating resources, and making informed strategy choices concerning community problem solving. Emphasis is primarily but not exclusively on residential communities. Students will have the opportunity to apply the course material in field projects.

3. *Theories and Strategies of Community Social Work* Mr. Holden

Major theories of community social work will be analyzed from a historical and ideological perspective. Their impact on the field will be assessed. This analysis will provide the basis for the development and evaluation of new models of practice for the 1980s.

4. *Planned Organizational Change* Mr. Mayer

The course focuses on the nature of planned institutional change. Institutions are defined as organizations which deliver a public good or service, or otherwise act in the public interest. Planned institutional change will be examined within a general model which depicts the relationship between an organization's *ideology*, *structure*, and use of *individual incentives*. The model will be applied in three areas of practice: criminal justice systems, schools, and human service systems. Students will be expected to develop a theoretically based understanding of institutional change, and to apply that understanding to a planned intervention in their area of practice.

6. *Psychological Contributions to Social Action* Mr. Lichtenberg

A working seminar that brings together and develops those psychological insights and suggestions that promote effective actions directed toward fundamental social change. The purpose is to develop materials that enable persons who are agents to work better with their own psychological issues, to

more soundly understand, mobilize and energize people in the interests of social change, and to more adequately understand resistances to change so that these can be dealt with in a fashion congruent with humane basic change.

567. *Critical Appraisal of Strategies of Intervention* Miss Zybon
The aims of the seminar are (1) to gain a sense of the history and trends of research to social work, particularly clinical social work; (2) to critically evaluate the quality, relevance, and utilization of studies of social work practice; and (3) to delineate the function of research in the evaluation and development of professional practice. The interests of students are considered in course planning.
568. *Social Problems and Social Casework* Miss Zybon
This seminar focuses on social casework (individual, group, and family treatment) from the perspective of social problems and strategies for their solution. Clinical issues are analyzed from the historical perspective in consideration of interacting societal factors. Developing trends in clinical social work knowledge and practice are identified. Implications for professional practice, education, and leadership are examined.
569. *Specific Intervention Strategies: Schools of Family Therapy* Miss Zybon
The purpose of the seminar is to study the theoretical foundations of family therapy, the state of research in this area, and a comparative analysis of the major schools of family therapy in relation to problems of various population groups. Issues and techniques of training are considered.
580. *Tutorial: Dissertation Research* Faculty
581. Two semesters of tutorial work with a faculty member of the student's choosing are devoted to reviewing the literature and designing the investigation that is to be the basis of the dissertation.



RESOURCES FOR GRADUATE WORK AT BRYN MAWR

Library

The Mariam Coffin Canaday Library and the eight auxiliary libraries of Bryn Mawr College, including the Art and Archaeology Library in the M. Carey Thomas Library, contain over 550,000 books and regularly receive more than 2000 periodicals as well as many scholarly series. The Library is open throughout the year with a liberal schedule of hours. Books are readily accessible on open stacks and in study rooms; individual carrels are available for advanced students.

The John D. Gordan Reference Center provides a focus for reference books and services in the library. In its card catalog, the main entry cards of the Haverford College Library join those of the Bryn Mawr Library, thus bringing more than 960,000 entries into one file. The Library is a member of the Pennsylvania Area Library Network/Union Library Catalogue of Pennsylvania (PALINET/ULC), which locates approximately 7,200,000 volumes in the Philadelphia area and throughout the state, including the libraries of the American Philosophical Society, the Library Company of Philadelphia, the Historical Society of Pennsylvania, the Academy of Natural Sciences, the Free Library of Philadelphia, the Franklin Institute, the College of Physicians, the Rosenbach Foundation, the University of Pennsylvania, and Temple University. In addition, through the PALINET component of the PALINET/ULC, the Library has access to the OCLC data bank of over 6,500,000 titles cataloged for academic and other libraries throughout the United States. The Library also began dial-access bibliographic research services in 1979.

Computer Center

In 1979-80 the College acquired a Hewlett-Packard 3000 computer, featuring 768 kbytes memory and 250 mbytes mass storage, tape drive, card reader and two printers. Interactive computing is supported through fifteen or more typewriter-like

terminals on campus. The languages APL and FORTRAN are available, as well as the packages from IMSL (International Mathematical and Statistical Library), SPSS (Statistical Package for the Social Sciences), BMDP (biomedical statistical package from UCLA), and DYNAMO (Dynamic Modelling language). Bryn Mawr is a member of the UniColl Corporation, a regional computer consortium in Philadelphia which provides the resources and technical support of a major facility, offering access to a pair of IBM 370/168 computers and a library of languages and applications.

Wyndham

Wyndham is the College Alumnae House where the headquarters of the Bryn Mawr College Alumnae Association is located. Graduate students are invited to use the dining and other facilities.

STUDENT SERVICES

Graduate Student Housing

Housing is available for about forty-three graduate students in the Glenmede Graduate Residence Center which consists of single rooms and three large double rooms in the main house, and a number of single rooms in the smaller houses on the estate. The College provides basic furniture; students supply linen, bed pillows, desk lamps, rugs, curtains and any other accessories they need. (Local rental services will supply sheets, blankets, and pillowcases for a modest fee. Arrangements may be made on arrival.) Because of college fire regulations, smoking is not permitted in the bedrooms. There are smokers on certain floors.

There is no food service in the center. Graduate students can avail themselves of kitchen facilities on a cooperative basis. Meal tickets can be bought for complete meal service or for incidental purchases of meals in the College dining rooms on campus.

Application for a room should be made as early as possible. A room contract, which will be sent upon request, must be signed and returned to the Office of the Graduate School of Arts and Sciences with a *deposit of ten dollars*. The deposit will be deducted from the residence fee; it will be refunded only if the student cannot be accommodated.

A student who has reserved a room will be held responsible for the residence charge unless notice of withdrawal is sent in writing to the Dean of the Graduate School of Arts and Sciences by August 15.

The regular charge for residence (room) for graduate students is \$1,600 a year, payable one half by September 1 and the other half by January 1. Although the Graduate Residence Center may be closed during the Christmas and spring vacations, when health service is not provided, residence on campus covers the period from the opening of College in the fall until Commencement Day. Baggage will be accepted at the College after August 20. It should be sent prepaid, addressed to the proper residence hall, and marked with the owner's name.

Health

Medical Services

The College maintains an Infirmary, with in-patient and out-patient services, open during the academic year but closed in the summer. There is twenty-four hour physician and RN coverage. The medical staff may be consulted without charge by students residing in campus housing. Students living off campus pay for health services, as rendered, at a nominal fee. If special consultation or private nursing care are necessary, the student must meet the expense. The College reserves the right to require a student to withdraw, for reasons of health, upon the recommendation of the College Physician.

A Counseling Service is available to all students. Consultation with a psychological social worker or psychiatrist should be arranged by appointment through the Infirmary Secretary. Counselors can be reached through the Infirmary in cases of emergency. A charge, determined on a sliding scale based on ability to pay, is made for visits to the Counseling Service in excess of four. Should long term therapy be necessary, the student is referred for outside private care.

The Infirmary offers use of its rooms for sleeping privileges, without meals or nursing care, for about \$6.00 a night (1980 rate).

Medical Requirements

All entering students must file medical history and evaluation forms with the Infirmary before registration for classes.

Insurance

All graduate students are urged to carry health insurance valid in the United States. For those who need coverage, student policies are offered and should be purchased by September first.

Child Care

The Phebe Anna Thorne School

Situated on the Bryn Mawr Campus, and integral to the Department of Education and Child Development, the Thorne School is a laboratory school which enrolls young children from nearby communities in creative, pre-kindergarten programs. The School has for its aim the fullest and happiest development of each child within the context of a group and offers half-day sessions Monday through Friday, September-May. For fees and information, write to or telephone the Director, The Phebe Anna Thorne School, Bryn Mawr College, Wyndon and Roberts Road, Bryn Mawr, Penna. 19010. (215) 527-5490.

New Gulph Children's Center

Child care on a space available basis for Bryn Mawr college families may be found at the New Gulph Children's Center, Conestoga and Sproul Rds., Villanova, just ten minutes from campus. Children 3 months through 6 years old are eligible. The center is open five days a week, 7:30 a.m.-5:30 p.m.

The center, conducted by professional staff, incorporates appropriate age group developmental activities with high quality group care, plus nursery school and kindergarten programs. Flexible schedules can be arranged to accommodate the programs of students. A minimum of nine hours regular use per week is required.

The fee scale is based on the age of the child and the number of hours at the center. Tuition for the semester is payable in advance. Financial assistance is available. Early registration for all programs is essential. For more information contact the Director at (215) 688-2411.

Career Planning Office

Graduate students are invited to make use of the services of the Career Planning Office. These services include counseling on career interests and concerns; information on specific openings for summer, temporary and permanent, full- and part-time positions; consultation on job-hunting methods. Upon

request the Career Planning Office also maintains and makes available to prospective employers the credentials of graduate students and alumnae. The credentials include curriculum vitae and faculty and employer references.

Equality of Opportunity

Bryn Mawr College admits students of any race, color, national and ethnic origin as well as the handicapped, to all the rights, privileges, programs and activities generally accorded or made available to students at the College. It does not discriminate on the basis of race, color or national or ethnic origin, age handicap in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other College-administered programs or in its employment practices.

To aid the handicapped, regional alumnae/i will provide reading services, orientation sessions and other services to applicants who make the College aware of their physical disabilities.

As required by Title IX of the 1972 Federal Education Amendments, it is also the policy of Bryn Mawr College not to discriminate on the basis of sex in its educational programs, activities, or employment practices. The admission of women in the Undergraduate College is in conformity with a provision of the Act. Inquiries regarding compliance with Title IX and other policies of non-discrimination may be directed to the Assistant to the President, Taylor Hall, or the Director of the Office for Civil Rights, Department of Education, Washington, D.C.

Family Educational Rights and Privacy Act of 1974

The Family Educational Rights and Privacy Act of 1974 was designed to protect the privacy of education records, to establish the right of students to inspect and review their education records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal

hearings. Students have the right to file complaints with the Family Educational Rights and Privacy Act Office (FERPA), Department of Education, 5411 Switzer Bldg., 330 C Street, SW, Washington, D.C. 20201, concerning alleged failures by the institution to comply with the Act.

Copies of Bryn Mawr's policy regarding the Act and procedures used by the College to comply with the Act can be found in the Office of the Dean. The policy is printed in the Bryn Mawr-Haverford Academic Regulations, which also list all education records maintained on students by this institution.

Questions concerning the Family Educational Rights and Privacy Act may be referred to the Office of the Dean.

Designation of Directory Information

Bryn Mawr College hereby designates the following categories of student information as public or "Directory Information." Such information may be disclosed by the institution for any purpose, at its discretion.

- | | |
|--------------|---|
| Category I | Name, address, dates of attendance, class |
| Category II | Previous institution(s) attended, major field of study, awards, honors, degree(s) conferred |
| Category III | Date of birth |
| Category IV | Telephone number |
| Category V | Marital Status |

Currently enrolled students may withhold disclosure of any category of information under the Family Educational Rights and Privacy Act of 1974 by written notification which must be in the Office of the Recorder, Taylor Hall, by 5 p.m. on the last Friday in September. Forms requesting the withholding of "Directory Information" are available in all Deans' offices and in the Office of the Recorder.

Bryn Mawr College assumes that failure on the part of any student to specifically request the withholding of categories of "Directory Information" indicates individual approval for disclosure.

GOVERNANCE

Bryn Mawr College is comprised of three schools: the Undergraduate College, the Graduate School of Arts and Sciences, and the Graduate School of Social Work and Social Research. Governance of the College is shared by the administration, the faculty, and the students under the general guidance of the Board of Trustees. Decisions governing the admission of students and the curriculum are made by the faculty of each of the constituent schools. Decisions regarding the appointment, reappointment, and tenure of faculty are made by the President of the College upon the recommendation of the Dean and of the faculty of the respective schools, and are subject to the approval of the Board. Students are consulted at all levels of decision-making. The Bryn Mawr College Council, comprised of administrators, faculty, staff, and students, advises the President on general matters of long-range importance to the College.

The Faculty

Under By-Laws subject to the approval of the General Faculty of the College, the Faculty of the Graduate School of Social Work and Social Research is the primary policy-making body in matters pertaining solely to the School. The Faculty conducts its business at six stated meetings during the year. The work of the Faculty is carried out by the following Committees:

Admissions and Financial Awards: Responsible for all matters relating to the admission and financing of students.

Doctoral Committee: Responsible for developing and implementing policy concerning the doctoral program, and for evaluating the educational performance of doctoral students.

Evaluation of Educational Performance of Master's Students: Has the sole authority to modify a course of study and to make appropriate decisions, including that of exclusion from the School, regarding academic failures of Master's students.

Field Instruction and Placement: Responsible for recommending policy regarding field instruction to the faculty and

for implementing existing policies, including the selection and evaluation of field placements.

Initial Appointments to the Faculty: Responsible for developing student and faculty viewpoints and for formulating a recommendation to the Dean regarding candidates for initial appointment to the faculty.

Master's Curriculum: Responsible for general review of the Master's curriculum and for recommending to the faculty the adoption of new course offerings, changes in curricular requirements, or the adoption or revision of programs.

Policy: Recommends to the faculty policies and plans for the long-range development of the School with respect to educational priorities and the deployment of resources.

The Students

The student body of the Graduate School of Social Work and Social Research is organized through the Student Association and through the Doctoral Students Association. Students, in equal number, serve as voting members of all Faculty Committees of the School and thereby have a direct voice in admissions, curriculum, initial appointments to the faculty, and the evaluation of student performance. Student representatives attend meetings of the faculty and are consulted on all matters decided by that body. In addition, students serve on the Advisory Council of the School, the Steering Committee of the Alumnae/i Association, and the Bryn Mawr College Council. A student representative of the School attends regular meetings of the Board of Trustees of the College and reports on matters of concern to students.

The Advisory Council

The Advisory Council of the School is a body of social welfare professionals, governmental officials, and citizens established to advise the Dean on general matters of long-range importance to the School, and to reflect needs for professional education experienced by the social welfare community. The Council, which meets four times a year, is self-appointed and

includes representatives of students, faculty, alumnae/i, and trustees of the College. The Chair of the Council is appointed by the President of the College.

Alumnae/i Association

The alumnae/i of the School are organized into an Association and are served by an elected Steering Committee. The Association conducts programs to further the professional development of alumnae/i, serves as a resource for the classroom and field instruction of the School, and provides a means by which alumnae/i share their professional concerns. The Association is particularly helpful in bringing the School to the attention of prospective students and in assisting graduates in establishing their professional careers.

Steering Committee

Marjorie Bayersdorfer, *Chairperson*
 Connie Beresin
 Elizabeth Buttenwieser
 William Gray
 William Krum
 John G. Loeb
 Goetz Mayer
 Letty Thall
 Michelle Turek
 Bertha Waters
 Kathrin Poole, *Student Representative*
ex officio
 Robert R. Mayer, *Dean*
 Ruth W. Mayden, *Assistant Dean*

AWARDS

The Susan B. Anthony Memorial Prize, value \$500, commemorating the great work of Susan B. Anthony for women, was founded by her friend Anna Howard Shaw and her niece Lucy E. Anthony. It is offered every two years to a graduate student at Bryn Mawr College who has published or submitted in final form for publication the best study dealing with the industrial, social, economic or political position of women. The award is made by a committee of which the President of the College is chairperson.

The Susan M. Kingsbury Grant in Social Research, value \$300, is awarded every third year on the recommendation of the Dean of the Graduate School of Social Work and Social Research to advanced students, men and women, preferably candidates for the degree of Doctor of Philosophy.

ENDOWED FUNDS

Emily Greene Balch Lecture Fund for Social Work and Social Research. Inspired by the alumna niece of Emily Greene Balch, A.B. '89, this permanent lecture fund honors one of the two American women ever to receive the Nobel Peace Prize.

Agnes M.H. Byrnes Memorial for Social Work and Social Research. Established for the Graduate School of Social Work and Social Research by the bequest of Miss Byrnes, who received her Ph.D. in Social Work in 1920.

Anita D. Lichtenstein Memorial Fund. Established in memory of Anita Lichtenstein, M.S.S. 1966 and a candidate for the Ph.D. The fund, established by her husband, friends, and colleagues, is used to provide an annual colloquium in which a family theorist or therapist lectures and conducts workshops for social work professionals and students.

Margaret Friend Low Fund for General Purposes—School of Social Work and Social Research. Established by an alumna of the Class of 1911 impressed by the work of graduate students in Social Work and Social Research.

Lelia Woodruff Stokes Fund for Faculty Support in the Graduate School of Social Work and Social Research. This fund was created by an alumna of the Class of 1907 shortly before her death. Lelia Woodruff Stokes was a friend and classmate of Carola Woerishoffer, whose legacy was the impetus for establishing the Graduate School of Social Work and Social Research.

Chair in Social Work and Social Research Fund. A \$10,000 gift from an anonymous donor established this fund as a nucleus to attract further donations.

FEES

Application (non-refundable)	
Degree program	\$25
Continuing Education	\$10
Tuition	
Full-time, 1980-81	\$5,350* /year
Part-time, Continuing Education	
Master's	\$600/course
Doctoral	\$765/course
Registered Auditors (same as above)	
Field instruction materials	\$50/year
Students must meet traveling and other expenses	
Continuing enrollment (Ph.D. students)	\$225/semester
(see p. 29)	
Late registration Fee†	\$10
Add-Drop Fee	\$10
Graduation Fee	\$50
Microfilming Ph.D. dissertation	\$40
Optional Expenses	
Residence in graduate student housing	
Room and board (9 months)	\$2,650
Room	\$1,600
Health insurance	
U.S. citizen	\$82
Foreign students	\$150

*These fees are in effect for 1980-81, and are subject to change. For current information call the Dean's Office, (215) 527-5403.

†Effective after September 10, semester I, and January 21, semester II.

Payment of Fees

Both tuition and residence fees will be billed by semester. The Education Plan of monthly payment in cooperation with the Provident National Bank is available for those who prefer to pay fees in monthly installments. Direct correspondence to the Comptroller of the College.

Refund Policy

In the event of withdrawal from the Graduate School of Social Work and Social Research, refunds will be made according to the following schedule.

For Semester I

Withdrawals August 31–September 12	75%
Withdrawals September 13–October 10	50%
Withdrawals after October 10	0%

For Semester II

Withdrawals January 19–January 30	75%
Withdrawals January 31–February 20	50%
Withdrawals after February 20	0%

For those students living in the Graduate Residence Center, the charge for residence is \$1600 in 1980–81. In accordance with the above schedule, if a student withdraws from graduate study a refund will be made of that portion of the fee which represents room, with the proviso that the College is able to reassign the student's space to some other student not previously in residence. The student is not entitled to dispose of the room he or she leaves vacant.

Appropriate reduction or remission will also be made for that portion of the residence fee which represents the cost of food.

Procedure for securing refunds:

Written notice must be received by the Dean of the School prior to the effective date of the withdrawal. Students who have received federally insured loans (loans guaranteed by state agencies—Guaranteed Student Loan Program—GSLP and National Direct Student Loans—NDSL) to meet any educational expenses for the current academic year must make an

appointment with the Comptroller of the College before leaving the School to arrange for the appropriate refund of the loans in question.

Tuition is due at registration or upon receipt of bill. Students whose fees are not paid within 10 days of receipt of bill in each semester will not be permitted to continue in residence or to attend classes. Degrees will not be awarded to any student owing money to the College or any College facility, nor will any transcript be issued.

No credit will be given for any semester's work if any bills remain outstanding, nor will the student be allowed to register for any subsequent semester.

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Directions to Bryn Mawr College

From the North and Northeast

The College is most easily reached using the Schuylkill Expressway (I-76). From the North and Northeast there are three approaches to I-76.

1. Walt Whitman Bridge, I-676 to I-76
2. Benjamin Franklin Bridge, I-76 (Vine Street) continuing west on I-76
3. Pennsylvania Turnpike to Exit 24 (Valley Forge Exit) continuing east on I-76

From these approaches you may use the following routes:

1. **CITY AVENUE** Take Exit 41 (City Avenue-U.S. 1 South) and proceed on City Avenue until City Avenue intersects route 30 (Lancaster Avenue). Turn right on Lancaster Avenue and drive approximately four miles to reach the center of Bryn Mawr. Turn right on Morris Avenue (Arco gas station) and follow the underpass. There is a College parking lot one and one-half blocks along Morris Avenue on the left.
2. **GULPH MILLS** Take Exit 27 (PA 320, Gulph Mills). Follow PA 320 south and turn left at the first traffic light onto Old Gulph Road. The College is three miles down the road on the right. A College Parking lot is located the third entrance on the right after Roberts Road.

From the West

Pennsylvania Turnpike to Exit 24 (Valley Forge Exit). Continue east on I-76 and take the Gulph Mills route described above.

From the South

Follow I-95 through Wilmington, Delaware, to Chester, Pennsylvania, then take the PA 352-Edgemont Avenue Exit. Immediately look for, and follow, signs for PA 320 North. Continue north on PA 320 for approximately 10.5 miles. Turn right on Bryn Mawr Avenue and follow until it crosses Lancaster Avenue and joins Morris Avenue. Turn left on Morris Avenue and follow the underpass. There is a College parking lot one and one-half blocks along Morris Avenue on the left.







BRYN MAWR COLLEGE CALENDAR

BRYN MAWR, PENNSYLVANIA 19010

ADDRESS CORRECTION REQUESTED

SECOND CLASS POSTAGE

PAID AT BRYN MAWR

PENNSYLVANIA



